INDEXES TO *JOM*, VOLUME 47

AUTHOR INDEX

JANUARY–DECEMBER 1995

A

ABKOWITZ, S. "The Commercial Application of Low-Cost Titanium Composites" (Overview), S. Abkowitz, P.F. Weihrauch, S.M. Abkowitz, and H.L. Heussi, August, pp. 40–41.

ABKOWITZ, S.M. "The Commercial Application of Low-Cost Titanium Composites" (*Overview*), S. Abkowitz, P.F. Weihrauch, S.M. Abkowitz, and H.L. Heussi, August, pp. 40–41.

ABRAHAM, T. "Growth Continues for Diamond, DLC, and CBN Markets" (*Economics*), T. Abraham, November, p. 60.

ABRAHAM, T. "Magnets and Magnetic Materials: A Technical Economic Analysis" (*Economics*), T. Abraham, January, pp. 16–18.

ADRIAENS, A. "Silver and Copper Artifacts from Ancient Anatolia" (*Archaeotechnology*), K.A. Yener, P. Jett, and A. Adriaens, May, pp. 70–72.

AIMONE, P.R. "An Integrated Procedure for Modeling Investment Castings" (*Overview*), J.S. Tu, R.K. Foran, A.M. Hines, and P.R. Aimone, October, pp. 64–68. <http://www.tms.org/pubs/journals/JOM/9510/Tu-9510.html>

ALABI, M.M. Review of the book *Rapidly Solidified Alloys—Processes, Structures, Properties, Applications* (*Division News*), February, insert.

ALI, A.F. "A Three-Step Approach to Designing a Metal-Forming Process" (*Overview*), J.S. Gunasekera and A.F. Ali, June, pp. 22–25.

ALIDINDI, S. "The Transient Plastic Phase Processing of Ceramic-Ceramic Composites" (*Overview*), M. Barsoum, A. Zavaliangos, S. Kalidindi, T. El-Raghy, and D. Brodkin, November, pp. 52–55.

ALTYNOVA, M. "High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G. Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.

ANDERSON, D.P. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.

ANDREWS, R.G. "The Effect of Surface Modification on Fretting Fatigue in Ti Alloy Turbine Components" (*Research Summary*), S. Chakravarty, R.G. Andrews, P.C. Patnaik, and A.K. Koul, April, pp. 31–35.

ARLYUK, B.I. "The World Aluminum Industry: Status and Prospects for 1996" (*Economics*), B.I. Arlyuk, November, pp. 29–30.

B

BAESLACK, W.A., III. "Joining Similar and Dissimilar Advanced Engineered Materials" (*Overview*), W.A. Baeslack III and F.H. Froes, March, pp. 13–15.

BALANETHIRAM, V.S. "High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G. Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.

BAOLU, C. "Engineering Education in a Global Community III: China" (*Education*), C. Baolu and L. Fuqi, November, p. 61.

BARSOUM, M. "The Transient Plastic Phase Processing of Ceramic-Ceramic Composites" (*Overview*), M. Barsoum, A. Zavaliangos, S. Kalidindi, T. El-Raghy, and D. Brodkin, November, pp. 52–55.

BEAZLEY, T.M. "AAES Reports the Engineering Salary Trends of 1994" (*Professional Affairs*), T.M. Beazley, May, pp. 12–13. <http://www.tms.org/pubs/journals/JOM/Beazley-9505.html>

BEAZLEY, T.M. "Forecasting Trends in Al Manufacturing and Marketing" (*Industrial Insight*), T.M. Beazley, November, pp. 26–27.

BEAZLEY, T.M. "Making the Oscar: Metal's Award-Winning Performance" (*Metallurgraphics: Special Edition*), T.M. Beazley, March, pp. 10–11.

BEAZLEY, T.M. "Recycling Industries Reach Out with Public Campaigns" (*Metallurgraphics*), T.M. Beazley, October, p. 10.

BEAZLEY, T.M. "Step Inside the Cyberworld of a Virtual Reality Steel Mill" (*Metallurgraphics: Special Edition*), T.M. Beazley, December, pp. 12–13. <http://www.tms.org/pubs/journals/JOM/9512/Beazley-9512.html>

BEAZLEY, T.M. "Supersonic Automotive Travel: Fast Approaching Reality?" (*Metallurgraphics: Special Edition*), T.M. Beazley, July, pp. 12–13.

BEAZLEY, T.M. "The Modern Home: A Study in Steel and Aluminum" (*Metallurgraphics*), T.M. Beazley, June, p. 52.

BEAZLEY, T.M. "Winning Micrographs Capture The Wonders of a 'Small World'" (*Metallurgraphics: Special Edition*), T.M. Beazley, February, pp. 10–11.

BHAGAT, R.B. Review of the book *Structure and Properties of Ceramics, Volume 11* (*Division News*), June, insert.

BID, P.N. "Casting Al Sheets on a Lab-Scale, Single-Roll, Continuous Sheet Caster" (*Research Summary*), S.P. Mehrotra, M.R.R.I. Shamsi, and P.N. Bid, August, pp. 18–21.

BINCZEWSKI, G.J. "The Point of a Monument: A History of the Aluminum Cap of the Washington Monument" (*Featured Overview*), G.J. Binczewski, November, pp. 20–25. <http://www.tms.org/pubs/journals/JOM/9511/Binczewski-9511.html>

BISHOP, R. "A Hopi Tradition: Yellow Firing Ceramics" (*Archaeotechnology*), V. Canouts and R. Bishop, September, pp. 58–59.

BLOOMER, T.E. "Effects of Oxygen on the Solidification Microstructure of $LaNi_5$" (*Research Summary*), T.W. Ellis, L.L. Jones, and T.E. Bloomer, February, pp. 47–49.

BOCCACCINI, A.R. "Processing Ceramic-Matrix Composites Using Electrophoretic Deposition" (*Research Summary*), A.R. Boccaccini and C.B. Ponton, October, pp. 34–37.

BONJOUR, C. "Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.

BOSE, A. "The Technology and Commercial Status of Powder-Injection Molding" (*Overview*), A. Bose, August, pp. 26–30.

BOSE, S.K. "Relating the Debye Temperature and Structural Stability of Rapidly Solidified Al Alloys" (*Research Summary*), R. Dasgupta and S.K. Bose, March, pp. 20–22.

BOSS, W. "Coating Ceramic Composites by a Laser In-Situ Reaction Technique" (*Research Summary*), N.B. Dahotre, C. Xiao, W. Boss, M.H. McCay, and T.D. McCay, October, pp. 51–53.

BOWEN, P. "Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.

BOWMAN, K.J. "Materials Concepts Using *Mathcad* Part I: Euler Angle Rotations and Stereographic Projection" (*Forum Features*), K.J. Bowman, March, pp. 66–68.

BOWMAN, K.J. "Materials Concepts Using *Mathcad* Part III: Mohr's Circle and Principal Stresses" (*Forum Features*), K.J. Bowman, June, pp. 60–61.

BOWMAN, K.J. "Materials Concepts Using *Mathcad* Part IV: Arbitrary Rotations of Second Rank Tensors" (*Forum Features*), K.J. Bowman, July, pp. 58–59.

BOWMAN, K.J. "Materials Concepts Using *Mathcad* Part V: Rotations of Elastic Constants" (*Forum Features*), K.J. Bowman, September, pp. 66–67.

BOWMAN, K.J. "Materials Concepts Using *Mathcad* Part II: Homogeneous Nucleation" (*Forum Features*), K.J. Bowman, April, p. 78.

BRADFORD, S.A. Review of the book *Progress in the Understanding and Prevention of Corrosion* (*Division News*), January.

BREUNIG, T.M. "Computed Tomography Part III: Volumetric, High-Resolution X-Ray Analysis of Fatigue Crack Closure" (*Research Summary*), S.R. Stock, A. Guvenilir, T.M. Breunig, J.H. Kinney, and M.C. Nichols, January, pp. 19–23.

BRIDENBAUGH, P.R. "Strategically Integrated Partnerships for Materials and Auto Producers" (*Industrial Insight*), P.R. Bridenbaugh, July, pp. 18–19.

BROCKENBOROUGH, W.E. "The Status of Applications for High-T_c Superconducting Wire" (*Overview*), W.E. Brockenborough and A.P. Malozemoff, August, pp. 59–60.

BRODKIN, D. "The Transient Plastic Phase Processing of Ceramic-Ceramic Composites" (*Overview*), M. Barsoum, A. Zavaliangos, S. Kalidindi, T. El-Raghy, and D. Brodkin, November, pp. 52–55.

BROWN, K.R. "The Increasing Use of Aluminum in Automotive Applications" (*Overview*), K.R. Brown, M.S. Venie, and R.A. Woods, July, pp. 20–23.

BUCHAN, R. "Recovering Plastics for Recycling by Mineral Processing Techniques" (*Overview*), R. Buchan and B. Yarar, February, pp. 52–55.

BULL, S.J. "High-Performance Diamond and Diamond-like Coatings" (*Overview*), S.J. Bull and P.R. Chalker, April, pp. 16–19.

C

CANOUTS, V. "A Hopi Tradition: Yellow Firing Ceramics" (*Archaeotechnology*), V. Canouts and R. Bishop, September, pp. 58–59.

CARRILLO ROMO, F. De J. "Recovering Metals from Hydrometallurgical Residues" (*Research Summary*), M.G. Sánchez Loredo, G.J. Román-Moguel, and F. de J. Carrillo Romo, June, pp. 46–47.

CARRY, C. "Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.

CHAKRAVARTY, S. "The Effect of Surface Modification on Fretting Fatigue in Ti Alloy Turbine Components" (*Research Summary*), S. Chakravarty, R.G. Andrews, P.C. Patnaik, and A.K. Koul, April, pp. 31–35.

CHALKER, P.R. "High-Performance Diamond and Diamond-like Coatings" (*Overview*), S.J. Bull and P.R. Chalker, April, pp. 16–19.

CHAMBERS, M.F. "Recovering Flake Graphite from Steelmaking Kish" (*Research Summary*), L.J. Nicks, F.H. Nehl, and M.F. Chambers, June, pp. 48–51.

CHARLIER, P. "Recycling Aluminum Foil from Post-Consumer Beverage Cartons" (*1995 Fall Extractive Meeting Preview: Aluminum Consumer Packaging*), P. Charlier and G. Sjöberg, October, pp. 12–13.

CHAUBAL, M.V. "Light Metals 1995: Advances in Aluminum Production" (*Conference Review*), M.V. Chaubal, R.A. Cheatham, B.J. Sadler, and R.G. Reddy, November, pp. 43–46.

CHAWLA, K.K. "The High-Temperature Application of Ceramic-Matrix Composites" (*Overview*), K.K. Chawla, December, pp. 19–21.

CHEATHAM, R.A. "Light Metals 1995: Advances in Aluminum Production" (*Conference Review*), M.V. Chaubal, R.A. Cheatham, B.J. Sadler, and R.G. Reddy, November, pp. 43–46.

CHO, W.D. "Developments in Physical Chemistry and Basic Principles" (*1995 Review of Extraction & Processing*), H.Y. Sohn and W.D. Cho, April, pp. 60–66.
CHUMBLEY, L.S. "A New Paradigm—Multi-User Scanning Electron Microscopy" (*Featured Overview*), L.S. Chumbley, M. Meyer, K. Fredrickson, and F.C. Laabs, September, pp. 13–17. <http://www.tms.org/pubs/journals/JOM/9509/Chumbley-9509.html>
CHUNG, D.D.L. Review of the book *Techniques in Rheological Measurement* (*Forum Features*), September, p. 68.
CLARK, J.P. "Lifetime Costing of the Body-in-White: Steel vs. Aluminum" (*Overview*), H.N. Han and J.P. Clark, May, pp. 22–28.
COPLEY, S.M. "Synthesizing and Processing Advanced Materials" (*Conference Review*), J. Singh and S.M. Copley, March, p. 29.
CRAIGHEAD, I.W. "Predicting Residual Stresses in Gas Turbine Components" (*Research Summary*), R.A. Wallis and I.W. Craighead, October, pp. 69–71.
CURTIS, R. Letter to the Editor, September, p. 3.

D

DAEHN, G.S. "High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G. Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.
DAHOTRE, N.B. "Coating Ceramic Composites by a Laser In-Situ Reaction Technique" (*Research Summary*), N.B. Dahotre, C. Xiao, W. Boss, M.H. McCay, and T.D. McCay, October, pp. 51–53.
DAHOTRE, N.B. Review of the book *Phase Transformations and Ablation in Laser-Treated Solids* (*Forum Features*), September, p. 68.
DALEY, J. "DOE's Program on the Application of High-T_c Wire" (*Overview*), R. Hawsey and J. Daley, August, pp. 56–58.
DARWISH, S.M.H. "Computer-Assisted Riser Design and Placement for Casting" (*Design*), S.M.H. Darwish, October, pp. 60–63.
DASGUPTA, R. "Relating the Debye Temperature and Structural Stability of Rapidly Solidified Al Alloys" (*Research Summary*), R. Dasgupta and S.K. Bose, March, pp. 20–22.
DAVIDSON, D.L. "Ceramic-Matrix Composites Fatigue and Fracture" (*Research Summary*), D.L. Davidson, October, pp. 46–50, 81–82.
DAVIES, C.H.J. Review of the book *Instructor's Manual: Engineering Materials Technology* (*Forum Features*), December, p. 55.
De FORCE, B. "A Clearer View of How Crevice Corrosion Occurs" (*Overview*), B. De Force and H. Pickering, September, pp. 22–27.
DELAEY, L. "Synthesizing Aluminum Alloys by Double Mechanical Alloying" (*Research Summary*), L. Froyen, L. Delaey, X.P. Niu, P. Le Brun, and C. Peytour, March, pp. 16–19.
DENBAARS, S.P. "From Research to Manufacture—The Evolution of MOCVD" (*Overview*), P. Grodzinski, S.P. DenBaars, and H.C. Lee, Dec., pp. 25–32.
DENNEY, P. "Laser Research at Penn State's ARL," Sidebar to "Mechanical Issues in Laser and Abrasive Water Jet Cutting" (*Research Summary*), J. Singh and P. Denney, January, p. 30.
DEVE, H.E. "Continuous-Fiber Reinforced Al Composites: A New Generation" (*Overview*), H.E. Deve and C. McCullough, July, pp. 33–37.
DÍAZ, G. "Zinc Recycling through the Modified Zincex Process" (*1995 Fall Extractive Meeting Preview: Secondary Zinc*), G. Díaz, D.M. San Lorenzo, and C.L. Gallego, October, pp. 22–23.
DÍAZ, G. Letter to the Editor, June, p. 4.
DIETER, G.E. Review of the book *Problems of Technological Plasticity* (*Division News*), August.
DREYER, C. "The Influence of Coke Source on Anode Performance" (*Research Summary*), C. Jonville, J.C. Thomas, and C. Dreyer, August, pp. 23–24.

E

EGGERT, R.G. "Critical Issues in the Reform of the Mining Law in the United States" (*1995 Review of Extraction & Processing*), R.G. Eggert, April, pp. 44–45.
EHRENREICH, R.M. Review of the book *A History of Metallurgy* (*Forum Features*), December, p. 55.
EL-KADDAH, N. "The Electromagnetic Filtration of Molten Aluminum Using an Induced-Current Separator" (*Research Summary*), N. El-Kaddah, A.D. Patel, and T.T. Natarajan, May, pp. 46–49.
EL-RAGHY, T. "The Transient Plastic Phase Processing of Ceramic-Ceramic Composites" (*Overview*), M. Barsoum, A. Zavaliangos, S. Kalidindi, T. El-Raghy, and D. Brodkin, November, pp. 52–55.
ELLIOT, S. Letter to the Editor, June, p. 3.
ELLIS, T.W. "Effects of Oxygen on the Solidification Microstructure of $LaNi_5$" (*Research Summary*), T.W. Ellis, L.L. Jones, and T.E. Bloomer, February, pp. 47–49.
ENSINGER, W.J. "The Ion-Beam Processing of Powders" (*Overview*), H.R. Müller and W.J. Ensinger, April, pp. 20–25.
ERICKSON, G.L. "A New, Third-Generation, Single-Crystal, Casting Superalloy" (*Overview*), G.L. Erickson, April, pp. 36–39.
EVANS, J.W. "The Use of Electromagnetic Casting for Al Alloys and Other Metals" (*Overview*), J.W. Evans, May, pp. 38–41.

F

FENTON, G. "High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G. Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.
FERGUS, J.W. "Electrochemical Magnesium Sensors for Use in Aluminum Processing" (*Overview*), J.W. Fergus, November, pp. 36–40.
FLANAGAN, W.F. "Detecting In-Situ Active Corrosion by a SQUID Magnetometer" (*Research Summary*), D. Li, Y. Ma, W.F. Flanagan, B.D. Lichter, and J.P. Wikswo, Jr., September, pp. 36–39.
FOLLANSBEE, P. "From the MDMD Chair" (*Division News*), August, insert.
FORAN, R.K. "An Integrated Procedure for Modeling Investment Castings" (*Overview*), J.S. Tu, R.K. Foran, A.M. Hines, and P.R. Aimone, October, pp. 64–68. <http://www.tms.org/pubs/journals/JOM/9510/Tu-9510.html>
FORREST, D.R. Letter to the Editor, June, p. 4.
FREAR, D.R. "Materials, Processing, and Reliability Issues for PWB Assemblies" (*Commentary*), D.R. Frear and W.L. Winterbottom, June, p. 26.
FREDRICKSON, K. "A New Paradigm—Multi-User Scanning Electron Microscopy" (*Featured Overview*), L.S. Chumbley, M. Meyer, K. Fredrickson, and F.C. Laabs, September, pp. 13–17. <http://www.tms.org/pubs/journals/JOM/9509/Chumbley-9510.html>
FRIEDRICH, H.E. "Forming and Bonding Techniques for High-Strength Aluminum Alloys" (*Overview*), H.E. Friedrich, February, pp. 33–35.
FROES, F.H. "Is It Time to Throw in the Towel on Advanced Materials?" (*Commentary*), F.H. Froes, March, p. 12.
FROES, F.H. "Joining Similar and Dissimilar Advanced Engineered Materials" (*Overview*), W.A. Baeslack III and F.H. Froes, March, pp. 13–15.
FROES, F.H. "The Workshop on Advanced Sintered Materials" (*Conference Review*), F.H. Froes, January, pp. 14–15.
FROYEN, L. "Synthesizing Aluminum Alloys by Double Mechanical Alloying" (*Research Summary*), L. Froyen, L. Delaey, X.P. Niu, P. Le Brun, and C. Peytour, March, pp. 16–19.
FU, C.-Y. "Characterizing the Temperature Dependence of Electronic Packaging-Material Properties" (*Testing & Analysis*), C.-Y. Fu and C. Ume, June, pp. 31–35.
FUQI, L. "Engineering Education in a Global Community III: China" (*Education*), C. Baolu and L. Fuqi, November, p. 61.

G

GALLEGO, C.L. "Zinc Recycling through the Modified Zincex Process" (*1995 Fall Extractive Meeting Preview: Secondary Zinc*), G. Díaz, D.M. San Lorenzo, and C.L. Gallego, October, pp. 22–23.
GANSERT, R. "Plasma-Spray Forming Ceramics and Layered Composites" (*Research Summary*), S. Sampath, R. Gansert, and H. Herman, October, pp. 30–33.
GARCÍA, A. "Copper Recycling from Waste Pickling Solutions" (*1995 Fall Extractive Meeting Preview: Secondary Copper*), G.J. Román-Moguel, G. Plascencia, J. Pérez, and A. García, October, pp. 18–19.
GERMAN, R.M. "Liquid-Phase Sintering under Microgravity Conditions" (*Overview*), R.M. German, R.G. Iacocca, J.L. Johnson, Y. Liu, and A. Upadhyaya, August, pp. 46–48.
GESSESSE, K. "Are Your Technical Journals an Endangered Species?" (*Economics*), G.W. Warren and K. Gessesse, January, pp. 12–13.
GHER, T. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.
GIANNELIS, E.P. "Interconnected Metal-Ceramic Composites by Chemical Means" (*Research Summary*), E.D. Rodeghiero, O.K. Tse, and E.P. Giannelis, March, pp. 26–28.
GILBERT, S.R. "Recovering Metals from Wastes" (*Industrial Insight*), V. Ramachandran and S.R. Gilbert, February, p. 64.
GILLON, P. "Materials Processing with High Direct-Current Magnetic Fields" (*Overview*), P. Gillon, May, pp. 34–37.
GLICKSMAN, M.E. "The Chronology of a Microgravity Spaceflight Experiment: IDGE" (*Overview*), M.E. Glicksman, M.B. Koss, and E.A. Winsa, August, pp. 49–54. <http://www.tms.org/pubs/journals/JOM/Glicksman-9508.html>
GOLDINER, M.G. "The Thermodynamics and Kinetics of Film Agglomeration" (*Tutorial*), D.J. Srolovitz and M.G. Goldiner, March, pp. 31–36, 76–77.
GOLECKI, I. Review of the software *Optimatr* (*Division News*), October.
GONSETH, D. "Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.
GONZALEZ-DOMINGUEZ, J.A. "Evaluating Additives and Impurities in Zinc Electrowinning" (*Research Summary*), J.A. Gonzalez-Dominguez and R.W. Lew, January, pp. 34–37.
GONZÁLEZ-VELÁZQUEZ, J.L. Letter to the Editor, June, p. 3.
GOPALAN, S. Letter to the Editor, September, p. 3.
GOYAL, A. "Progress Toward Bulk Application of High-T_c Superconductors" (*Commentary*), A. Goyal, August, p. 55.
GRANGER, D.A. "Effects of Sodium and Bismuth in Aluminum-Magnesium Alloys" (*Research Summary*), D.E.J. Talbot and D.A. Granger, Feb., pp. 44–46.
GRJOTHEIM, K. "Key Improvements to Hall-Héroult Since the End of World War II" (*Overview*), K. Grjotheim, H. Kvande, and Q. Zhuxian, November, pp. 32–35.
GRODZINSKI, P. "From Research to Manufacture—The Evolution of MOCVD" (*Overview*), P. Grodzinski, S.P. DenBaars, and H.C. Lee, Dec., pp. 25–32.
GULA, M.J. "The Role of Hydrometallurgy in Treating Nuclear Waste" (*Overview*), M.J. Gula, G.T. Totura,

and L. Jassin, September, pp. 54–57.
GUNASEKERA, J.S. "A Three-Step Approach to Designing a Metal-Forming Process" (*Overview*), J.S. Gunasekera and A.F. Ali, June, pp. 22–25.
GUVENILIR, A. "Computed Tomography Part III: Volumetric, High-Resolution X-Ray Analysis of Fatigue Crack Closure" (*Research Summary*), S.R. Stock, A. Guvenilir, T.M. Breunig, J.H. Kinney, and M.C. Nichols, January, pp. 19–23.
GUY, A.G. LETTER TO THE EDITOR, September, pp. 3–4.

H

HAGNI, R.D. "Recent Developments in the Application of Process Mineralogy" (*1995 Review of Extraction & Processing*), R.D. Hagni, April, p. 46.
HALDAR, P. "Superconductivity Research and Applications Development at IGC" (*Overview*), R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, and P. Haldar, August, pp. 61–64.
HAN, H.N. "Lifetime Costing of the Body-in-White: Steel vs. Aluminum" (*Overview*), H.N. Han and J.P. Clark, May, pp. 22–28.
HANSEN, B.J. "Production of By-Product Mercury" (*1995 Fall Extractive Meeting Preview: General Recycling*), P.B. Queneau, C.W. Kenney, and B.J. Hansen, October, pp. 24–28.
HARIPRASAD, S. "Processing Maps for Optimizing Gas Atomization and Spray Deposition" (*Overview*), S. Hariprasad and S.M.L. Sastry, Oct., pp. 56–59.
HARTWIG, K.T. "Microalloyed Aluminum for Cryogenic Conductors" (*Research Summary*), L.C. McDonald, K.T. Hartwig, and A. Takahashi, Feb., pp. 41–43.
HARUFF, J.P. "The Sensitivity of Lab-Measured Friction Coefficients" (*Testing & Analysis*), J.P. Haruff, C.J. Van Tyne, and D.K. Matlock, July, pp. 50–52.
HASSON, D.F. "RETROSPECT," January, p. 64; February, p. 84; March, p. 80; April, p. 88; May, p. 88; June, p. 72; July, p. 68; August, p. 84; September, p. 76; October, p. 88; November, p. 84; December, p. 80.
HAWSEY, R. "DOE's Program on the Application of High-T_c Wire" (*Overview*), R. Hawsey and J. Daley, August, pp. 56–58.
HAZELTON, D.W. "Superconductivity Research and Applications Development at IGC" (*Overview*), R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, and P. Haldar, August, pp. 61–64.
HELDT, L.A. LETTER TO THE EDITOR, June, p. 4.
HELLAWELL, A. "Modification of Al-Si Alloys: Microstructure, Thermal Analysis, and Mechanisms" (*Overview*), S.-Z. Lu and A. Hellawell, Feb., pp. 38–40.
HELLAWELL, A. "Using Fractal Analysis to Describe Irregular Microstructures" (*Overview*), S.-Z. Lu and A. Hellawell, December, pp. 14–17.
HENDERSON, J. "The Analysis of Ancient Glasses Part I: Materials, Properties, and Early European Glass" (*ARCHAEOTECHNOLOGY*), J. Henderson, November, pp. 62–64.
HENEIN, H. "An Atomization Technique for Upgrading Automotive Al Scrap" (*1995 Fall Extractive Meeting Preview: Secondary Aluminum*), K.P. Olsen, G. Sterzik, and H. Henein, October, pp. 14–15.
HERMAN, H. "Plasma-Spray Forming Ceramics and Layered Composites" (*Research Summary*), S. Sampath, R. Gansert, and H. Herman, October, pp. 30–33.
HEUSSI, H.L. "The Commercial Application of Low-Cost Titanium Composites" (*Overview*), S. Abkowitz, P.F. Weihrauch, S.M. Abkowitz, and H.L. Heussi, August, pp. 40–41.
HILLMAN, D. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.
HINES, A.M. "An Integrated Procedure for Modeling Investment Castings" (*Overview*), J.S. Tu, R.K. Foran, A.M. Hines, and P.R. Aimone, October, pp. 64–68. <http://www.tms.org/pubs/journals/JOM/9510/Tu-9510.html>
HOFMANN, H. "Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.
HOOPUTRA, H. "Optimizing the Corrosion Fatigue Properties of Co-Cr-Mo Hip Joints" (*Research Summary*), H.M. Tensi, H. Hooputra, W. Weinfurtner, and H. Mayr, January, pp. 25–27.
HYERS, R. "Electromagnetic Levitation—A Useful Tool in Microgravity Research" (*Overview*), J. Szekely, E. Schwartz, and R. Hyers, May, pp. 50–53.
HYLAND, M.M. "Interfacial Processes and the Performance of Cathode Linings in Aluminum Smelters" (*Research Summary*), B.J. James, B.J. Welch, M.M. Hyland, J.B. Metson, and C.D. Morrison, February, pp. 22–25.

I

IACOCCA, R.G. "Liquid-Phase Sintering under Microgravity Conditions" (*Overview*), R.M. German, R.G. Iacocca, J.L. Johnson, Y. Liu, and A. Upadhyaya, August, pp. 46–48.
IMAMURA, M. "Recovering Iron, Manganese, Copper, Cobalt, and High-Purity Nickel from Sea Nodules" (*Research Summary*), T. Kohga, M. Imamura, J. Takahashi, N. Tanaka, and T. Nishizawa, December, pp. 40–43.
IMBERMAN, W. "Improving Plant Performance Through Gainsharing" (*MATERIAL MATTERS*), W. Imberman, July, p. 57. <http://www.tms.org/pubs/journals/JOM/matters/matters-9507.html>

J

JAIN, S.C. "Mechanical Issues in Laser and Abrasive Water Jet Cutting" (*Research Summary*), J. Singh and S.C. Jain, January, pp. 28–30.
JAIN, S.C. "Process Modeling Today: From Lab to Shop and from Art to Part" (*Commentary*), S.C. Jain, October, p. 55.
JAMBAZIAN, P. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.
JAMES, B.J. "Interfacial Processes and the Performance of Cathode Linings in Aluminum Smelters" (*Research Summary*), B.J. James, B.J. Welch, M.M. Hyland, J.B. Metson, and C.D. Morrison, February, pp. 22–25.
JASSIN, L. "The Role of Hydrometallurgy in Treating Nuclear Waste" (*Overview*), M.J. Gula, G.T. Totura, and L. Jassin, September, pp. 54–57.
JEANDIN, M. "Using Coated Ceramic Particles to Increase Wear Resistance in High-Speed Steels" (*Research Summary*), C. Jouanny-Tresy, M. Vardavoulias, and M. Jeandin, April, pp. 26–30.
JETT, P. "Silver and Copper Artifacts from Ancient Anatolia" (*ARCHAEOTECHNOLOGY*), K.A. Yener, P. Jett, and A. Adriaens, May, pp. 70–72.
JINKA, A.G.K. "The Computer-Aided Hot-Forging Simulation of P/M Connecting Rods" (*Overview*), A.G.K. Jinka, August, pp. 42–45.
JOHNSON, J.L. "Liquid-Phase Sintering under Microgravity Conditions" (*Overview*), R.M. German, R.G. Iacocca, J.L. Johnson, Y. Liu, and A. Upadhyaya, August, pp. 46–48.
JONES, L.L. "Effects of Oxygen on the Solidification Microstructure of $LaNi_5$" (*Research Summary*), T.W. Ellis, L.L. Jones, and T.E. Bloomer, February, pp. 47–49.
JONES, R.H. "Concepts in Preventing the Early Stages of Aqueous Stress-Corrosion Cracking" (*Overview*), R.H. Jones and E.P. Simonen, Sept., pp. 28–31.
JONVILLE, C. "The Influence of Coke Source on Anode Performance" (*Research Summary*), C. Jonville, J.C. Thomas, and C. Dreyer, August, pp. 23–24.
JOUANNY-TRESY, C. "Using Coated Ceramic Particles to Increase Wear Resistance in High-Speed Steels" (*Research Summary*), C. Jouanny-Tresy, M. Vardavoulias, and M. Jeandin, April, pp. 26–30.

K

KATO, M. "The Production of Ultrahigh-Purity Copper for Advanced Applications" (*Overview*), M. Kato, December, pp. 44–46.
KENNEY, C.W. "Production of By-Product Mercury" (*1995 Fall Extractive Meeting Preview: General Recycling*), P.B. Queneau, C.W. Kenney, and B.J. Hansen, October, pp. 24–28.
KIM, P. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.
KIM, Y.-W. "Gamma Titanium Aluminides" (*Conference Review*), Y.-W. Kim, July, p. 38.
KIM, Y.-W. "Gamma Titanium Aluminides: Their Status and Future" (*Overview*), Y.-W. Kim, July, pp. 39–41.
KINNEY, J.H. "Computed Tomography Part III: Volumetric, High-Resolution X-Ray Analysis of Fatigue Crack Closure" (*Research Summary*), S.R. Stock, A. Guvenilir, T.M. Breunig, J.H. Kinney, and M.C. Nichols, January, pp. 19–23.
KIPOUROS, G.J. "Lightweight Materials for Transportation Applications" (*Commentary*), D.R. Lesuer and G.J. Kipouros, July, p. 17.
KIPOUROS, G.J. "Magnesium and Other Reactive Metals: Have They Matured?" (*Conference Preview*), G.J. Kipouros, December, pp. 38–39.
KISHI, T. "Engineering Education in a Global Community I: Japan" (*Education*), T. Kishi, August, p. 68.
KNIGHT, R. "Thermal Spraying I: Powder Consolidation—From Coating to Forming" (*Overview*), R.W. Smith and R. Knight, August, pp. 32–39.
KNORR, D.B. "The Multichip Module as a Board-Level Package" (*Overview*), D.B. Knorr, June, pp. 27–30.
KOEBNICK, V. "I'm at Your Service—Manager of Education & Professional Affairs" (*TMS News*), V. Koebnick, December, p. 52.
KOHGA, T. "Recovering Iron, Manganese, Copper, Cobalt, and High-Purity Nickel from Sea Nodules" (*Research Summary*), T. Kohga, M. Imamura, J. Takahashi, N. Tanaka, and T. Nishizawa, December, pp. 40–43.
KOSS, M.B. "The Chronology of a Microgravity Spaceflight Experiment: IDGE" (*Overview*), M.E. Glicksman, M.B. Koss, and E.A. Winsa, August, pp. 49–54. <http://www.tms.org/pubs/journals/JOM/Glicksman-9508.html>
KOUL, A.K. "The Effect of Surface Modification on Fretting Fatigue in Ti Alloy Turbine Components" (*Research Summary*), S. Chakravarty, R.G. Andrews, P.C. Patnaik, and A.K. Koul, April, pp. 31–35.
KOZOL, J. "The Shipboard Exposure Testing of Aircraft Materials" (*Research Summary*), E. Tankins, J. Kozol, and E.W. Lee, September, pp. 40–44.
KVANDE, H. "Key Improvements to Hall-Héroult Since the End of World War II" (*Overview*), K. Grjotheim, H. Kvande, and Q. Zhuxian, November, pp. 32–35.

L

LAABS, F.C. "A New Paradigm—Multi-User Scanning Electron Microscopy" (*Featured Overview*), L.S. Chumbley, M. Meyer, K. Fredrickson, and F.C. Laabs, September, pp. 13–17. <http://www.tms.org/pubs/journals/JOM/9509/Chumbley-9509.html>
LANKFORD, J. "The Failure of Fiber-Reinforced Ceramic-Matrix Composites Under Dynamic Loading" (*Research Summary*), J. Lankford, May, pp. 64–68.
LASALVIA, J. "The One-Step Synthesis of Dense Titanium-Carbide Tiles" (*Applied Technology*), R.V.

Raman, S.V. Rele, S. Poland, J. Lasalvia, M.A. Meyers, and A.R. Niiler, March, pp. 23–25.
LAUDISE, R.A. "The Impact of the New Congress on U.S. Materials Policy" (*Conference Review*), R.A. Laudise, June, pp. 12–13.
Le BRUN, P. "Synthesizing Aluminum Alloys by Double Mechanical Alloying" (*Research Summary*), L. Froyen, L. Delaey, X.P. Niu, P. Le Brun, and C. Peytour, March, pp. 16–19.
LEBER, B.P., Jr. "Characterizing Emissions from a Söderberg Aluminum Smelter" (*Research Summary*), B.P. Leber, Jr., and P.F. Schmeil, May, pp. 20–21.
LEE, D. "Recent Developments in a Vision-Based Surface Strain Measurement System" (*Overview*), D.W. Manthey and D. Lee, July, pp. 46–49. <http://www.tms.org/pubs/journals/JOM/Manthey-9507.html>
LEE, E.W. "The Shipboard Exposure Testing of Aircraft Materials" (*Research Summary*), E. Tankins, J. Kozol, and E.W. Lee, September, pp. 40–44.
LEE, H.C. "From Research to Manufacture—The Evolution of MOCVD" (*Overview*), P. Grodzinski, S.P. DenBaars, and H.C. Lee, December, pp. 25–32.
LESUER, D.R. "Lightweight Materials for Transportation Applications" (*Commentary*), D.R. Lesuer and G.J. Kipouros, July, p. 17.
LEW, R.W. "Evaluating Additives and Impurities in Zinc Electrowinning" (*Research Summary*), J.A. Gonzalez-Dominguez and R.W. Lew, January, pp. 34–37.
LI, B.Q. "Producing Thin Strips by Twin-Roll Casting—Part I: Process Aspects and Quality Issues" (*Overview*), B.Q. Li, May, pp. 29–33.
LI, B.Q. "Producing Thin Strips by Twin-Roll Casting—Part II: Process Modeling and Development" (*Overview*), B.Q. Li, August, pp. 13–17.
LI, D. "Detecting In-Situ Active Corrosion by a SQUID Magnetometer" (*Research Summary*), D. Li, Y. Ma, W.F. Flanagan, B.D. Lichter, and J.P. Wikswo, Jr., September, pp. 36–39.
LIAW, P.K. "Expanding the Application of Ceramic-Matrix Composites" (*Commentary*), P.K. Liaw, October, p. 29.
LIAW, P.K. "Fiber-Reinforced CMCs: Processing, Mechanical Behavior, and Modeling" (*Overview*), P.K. Liaw, October, pp. 38–44.
LICHTER, B.D. "Detecting In-Situ Active Corrosion by a SQUID Magnetometer" (*Research Summary*), D. Li, Y. Ma, W.F. Flanagan, B.D. Lichter, and J.P. Wikswo, Jr., September, pp. 36–39.
LIU, Y. "Liquid-Phase Sintering under Microgravity Conditions" (*Overview*), R.M. German, R.G. Iacocca, J.L. Johnson, Y. Liu, and A. Upadhyaya, August, pp. 46–48.
LU, S.-Z. "Modification of Al-Si Alloys: Microstructure, Thermal Analysis, and Mechanisms" (*Overview*), S.-Z. Lu and A. Hellawell, February, pp. 38–40.
LU, S.-Z. "Using Fractal Analysis to Describe Irregular Microstructures" (*Overview*), S.-Z. Lu and A. Hellawell, December, pp. 14–17.
LUCEY, G.K. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.
LUO, A. "Magnesium Castings for Automotive Applications" (*Overview*), A. Luo, J. Renaud, I. Nakatsugawa, and J. Plourde, July, pp. 28–31.

M

MA, Y. "Detecting In-Situ Active Corrosion by a SQUID Magnetometer" (*Research Summary*), D. Li, Y. Ma, W.F. Flanagan, B.D. Lichter, and J.P. Wikswo, Jr., September, pp. 36–39.
MAGERS, D.M. "Developments in the Global Mg Market" (*Economics*), D.M. Magers, July, p. 26.
MAKOWSKI, R. "I'm at Your Service—Director of Publishing Services" (*TMS News*), R.A. Makowski, August, p. 71.
MALOZEMOFF, A.P. "The Status of Applications for High-T_c Superconducting Wire" (*Overview*), W.E. Brockenborough and A.P. Malozemoff, August, pp. 59–60.
MANAKTALA, S.C. "The Russian Al Industry's Difficult Transition to a Market Economy" (*Overview*), S.C. Manaktala, May, pp. 14–18.
MANTHEY, D.W. "Recent Developments in a Vision-Based Surface Strain Measurement System" (*Overview*), D.W. Manthey and D. Lee, July, pp. 46–49. <http://www.tms.org/pubs/journals/JOM/Manthey-9507.html>
MARI, D. "Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.
MARSDEN, K. LETTER TO THE EDITOR, June, p. 3.
MARSH, J.H. Review of the book *Techniques and Mechanisms in Electrochemistry* (*Division News*), September.
MARSHALL, A.F. "Characterizing the Microstructure of Interfaces in Y-123 Thin Films" (*Testing & Analysis*), A.F. Marshall, March, pp. 43–46.
MARTINEZ, L. "Recent Developments in the Search for Ultrahard Materials" (*Commentary*), L. Martinez, November, p. 48.
MATLOCK, D.K. "The Sensitivity of Lab-Measured Friction Coefficients" (*Testing & Analysis*), J.P. Haruff, C.J. Van Tyne, and D.K. Matlock, July, pp. 50–52.
MATTOX, D. Review of the book *Integrating Reliability into Microelectronics Manufacturing* (*FORUM Features*), September, p. 68.
MAYR, H. "Optimizing the Corrosion Fatigue Properties of Co-Cr-Mo Hip Joints" (*Research Summary*), H.M. Tensi, H. Hooputra, W. Weinfurtner, and H. Mayr, January, pp. 25–27.
McCAY, M.H. "Coating Ceramic Composites by a Laser In-Situ Reaction Technique" (*Research Summary*), N.B. Dahotre, C. Xiao, W. Boss, M.H. McCay, and T.D. McCay, October, pp. 51–53.
McCAY, T.D. "Coating Ceramic Composites by a Laser In-Situ Reaction Technique" (*Research Summary*), N.B. Dahotre, C. Xiao, W. Boss, M.H. McCay, and T.D. McCay, October, pp. 51–53.
McCULLOUGH, C. "Continuous-Fiber Reinforced Al Composites: A New Generation" (*Overview*), H.E. Deve and C. McCullough, July, pp. 33–37.
McDONALD, L.C. "Microalloyed Aluminum for Cryogenic Conductors" (*Research Summary*), L.C. McDonald, K.T. Hartwig, and A. Takahashi, February, pp. 41–43.
McHARGUE, C.J. "Engineering Education in a Global Technical Community" (*Conference Review*), C.J. McHargue and M.J. Yacamán, July, pp. 14–16.
McKIMPSON, M.G. "The Consolidation Processing of Powder Materials" (*Commentary*), M.G. McKimpson and J. Sears, August, p. 25.
McLEAN, A. "Paths of Progress in Liquid Metal Processing" (*1995 Review of Extraction & Processing*), A. McLean, H. Soda, and I.D. Sommerville, April, pp. 67–72.
MEHROTRA, S.P. "Casting Al Sheets on a Lab-Scale, Single-Roll, Continuous Sheet Caster" (*Research Summary*), S.P. Mehrotra, M.R.R.I. Shamsi, and P.N. Bid, August, pp. 18–21.
MEHTA, R.K. "Remediating Heavy Metals, Radicnuclides, and Organic Pollutants from Soils" (*Overview*), M. Misra and R.K. Mehta, Sept., pp. 45–53.
MEISEN, A. "Engineering Education in a Global Community II: Canada" (*Education*), A. Meisen, September, pp. 18–21.
MELDER, J. "I'm at Your Service—Manager of Member Services" (*TMS News*), J. Melder, September, p. 62.
MELTSNER, K.J. "Understanding the Internet: A Guide for Materials Scientists and Engineers" (*Featured Overview*), K.J. Meltsner, April, pp. 9–13. <http://www.tms.org/pubs/journals/JOM/Meltsner-9504.html>
METSON, J.B. "Interfacial Processes and the Performance of Cathode Linings in Aluminum Smelters" (*Research Summary*), B.J. James, B.J. Welch, M.M. Hyland, J.B. Metson, and C.D. Morrison, February, pp. 22–25.
MEYER, M. "A New Paradigm—Multi-User Scanning Electron Microscopy" (*Featured Overview*), L.S. Chumbley, M. Meyer, K. Fredrickson, and F.C. Laabs, September, pp. 13–17. <http://www.tms.org/pubs/journals/JOM/9509/Chumbley-9509.html>
MEYERS, M.A. "The One-Step Synthesis of Dense Titanium-Carbide Tiles" (*Applied Technology*), R.V. Raman, S.V. Rele, S. Poland, J. Lasalvia, M.A. Meyers, and A.R. Niiler, March, pp. 23–25.
MISRA, M. "Remediating Heavy Metals, Radionuclides, and Organic Pollutants from Soils" (*Overview*), M. Misra and R.K. Mehta, September, pp. 45–53.
MORRISON, C.D. "Interfacial Processes and the Performance of Cathode Linings in Aluminum Smelters" (*Research Summary*), B.J. James, B.J. Welch, M.M. Hyland, J.B. Metson, and C.D. Morrison, February, pp. 22–25.
MOTOWIDLO, L.R. "Superconductivity Research and Applications Development at IGC" (*Overview*), R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, and P. Haldar, August, pp. 61–64.
MÜLLER, H.R. "The Ion-Beam Processing of Powders" (*Overview*), H.R. Müller and W.J. Ensinger, April, pp. 20–25.
MULONE, R. "Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.
MUNSON, M.C. "Events and Trends in Metal and Mineral Commodities" (*1995 Review of Extraction & Processing*), M.C. Munson, April, pp. 54–58.
MUNSON, M.C. "I'm at Your Service—TMS OnLine Supervisor" (*TMS News*), M.C. Munson, July, p. 56.

N

NAKATSUGAWA, I. "Magnesium Castings for Automotive Applications" (*Overview*), A. Luo, J. Renaud, I. Nakatsugawa, and J. Plourde, July, pp. 28–31.
NATARAJAN, T.T "The Electromagnetic Filtration of Molten Aluminum Using an Induced-Current Separator" (*Research Summary*), N. El-Kaddah, A.D. Patel, and T.T. Natarajan, May, pp. 46–49.
NEFF, H. "The Development of Plumbate Ceramic Ware in Southern Mesoamerica" (*ARCHAEOTECHNOLOGY*), H. Neff, March, pp. 52–56.
NEHL, F.H. "Recovering Flake Graphite from Steelmaking Kish" (*Research Summary*), L.J. Nicks, F.H. Nehl, and M.F. Chambers, June, pp. 48–51.
NICHOLS, M.C. "Computed Tomography Part III: Volumetric, High-Resolution X-Ray Analysis of Fatigue Crack Closure" (*Research Summary*), S.R. Stock, A. Guvenilir, T.M. Breunig, J.H. Kinney, and M.C. Nichols, January, pp. 19–23.
NICKS, L.J. "Recovering Flake Graphite from Steelmaking Kish" (*Research Summary*), L.J. Nicks, F.H. Nehl, and M.F. Chambers, June, pp. 48–51.
NIILER, A.R. "The One-Step Synthesis of Dense Titanium-Carbide Tiles" (*Applied Technology*), R.V. Raman, S.V. Rele, S. Poland, J. Lasalvia, M.A. Meyers, and A.R. Niiler, March, pp. 23–25.
NISHIZAWA, T. "Recovering Iron, Manganese, Copper, Cobalt, and High-Purity Nickel from Sea Nodules" (*Research Summary*), T. Kohga, M. Imamura, J. Takahashi, N. Tanaka, and T. Nishizawa, December, pp. 40–43.
NIU, X.P. "Synthesizing Aluminum Alloys by Double Mechanical Alloying" (*Research Summary*), L. Froyen, L. Delaey, X.P. Niu, P. Le Brun, and C. Peytour, March, pp. 16–19.

O

OLARU, P.C. "Recycling Al-Si Alloys from Spacecraft Accessories" (*1995 Fall Extractive Meeting Preview:*

Secondary Aluminum), P.C. Olaru, October, p. 16.
OLSEN, K.P. "An Atomization Technique for Upgrading Automotive Al Scrap" (*1995 Fall Extractive Meeting Preview: Secondary Aluminum*), K.P. Olsen, G. Sterzik, and H. Henein, October, pp. 14–15.
ØYE, H.A. "Carbon Cathode Materials: Approval and Quality Control Procedures" (*Overview*), H.A. Øye, February, pp. 14–18, 21.

P

PADMANABHAN, M. "High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G. Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.
PAINE, D.C. "ITO Thin-Film Transparent Conductors: Microstructure and Processing" (*Testing & Analysis*), Y. Shigesato, I. Yasui, and D.C. Paine, March, pp. 47–50.
PAINE, D.C. "Thin Films and Interfaces: Modeling and Characterization" (*Commentary*), D.C. Paine, March, p. 30.
PAK, Y. "The Armored Warriors of Kaya" (*Archaeotechnology*), Y. Pak, January, pp. 38–39.
PARK, B. "The Feasibility of Forming Superhard Nitrides by Ion Implantation" (*Research Summary*), B. Park, November, pp. 49–51.
PARSEY, J.M., Jr. "Epitaxy: The Key to High-Performance Semiconductor Devices" (*Commentary*), J.M. Parsey, Jr., December, p. 24.
PATEL, A.D. "The Electromagnetic Filtration of Molten Aluminum Using an Induced-Current Separator" (*Research Summary*), N. El-Kaddah, A.D. Patel, and T.T. Natarajan, May, pp. 46–49.
PATNAIK, P.C. "The Effect of Surface Modification on Fretting Fatigue in Ti Alloy Turbine Components" (*Research Summary*), S. Chakravarty, R.G. Andrews, P.C. Patnaik, and A.K. Koul, April, pp. 31–35.
PELTIER, J. Letter to the Editor, September, p. 3.
PENDLEY, M.R. Review of the book *Modern Grinding Process Technology* (*Division News*), February.
PÉREZ, J. "Copper Recycling from Waste Pickling Solutions" (*1995 Fall Extractive Meeting Preview: Secondary Copper*), G.J. Román-Moguel, G. Plascencia, J. Pérez, and A. García, Oct., pp. 18–19.
PETERSON, R.D. "Issues in the Melting and Reclamation of Aluminum Scrap" (*Overview*), R.D. Peterson, February, pp. 27–29.
PEYTOUR, C. "Synthesizing Aluminum Alloys by Double Mechanical Alloying" (*Research Summary*), L. Froyen, L. Delaey, X.P. Niu, P. Le Brun, and C. Peytour, March, pp. 16–19.
PHILLIPS, R. "The Modeling of Interfaces: Atoms or Continua?" (*Tutorial*), R. Phillips, March, pp. 37–42, 74–75.
PICKERING, H. "A Clearer View of How Crevice Corrosion Occurs" (*Overview*), B. De Force and H. Pickering, September, pp. 22–27.
PIEKARSKI, B. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.
PLASCENCIA, G. "Copper Recycling from Waste Pickling Solutions" (*1995 Fall Extractive Meeting Preview: Secondary Copper*), G.J. Román-Moguel, G. Plascencia, J. Pérez, and A. García, October, pp. 18–19.
PLETKA, B. "The High-Strain-Rate Deformation and Fracture of Materials" (*Commentary*), B. Pletka, May, p. 54.
PLETKA, B.J. "Strain-Rate Effects in High-Purity Alumina" (*Research Summary*), J.M. Staehler, W.W. Predebon, B.J. Pletka, and G. Subhash, May, pp. 60–63.
PLOURDE, J. "Magnesium Castings for Automotive Applications" (*Overview*), A. Luo, J. Renaud, I. Nakatsugawa, and J. Plourde, July, pp. 28–31.
POLAND, S. "The One-Step Synthesis of Dense Titanium-Carbide Tiles" (*Applied Technology*), R.V. Raman, S.V. Rele, S. Poland, J. Lasalvia, M.A. Meyers, and A.R. Niiler, March, pp. 23–25.
PONTON, C.B. "Processing Ceramic-Matrix Composites Using Electrophoretic Deposition" (*Research Summary*), A.R. Boccaccini and C.B. Ponton, October, pp. 34–37.
PREDEBON, W.W. "Strain-Rate Effects in High-Purity Alumina" (*Research Summary*), J.M. Staehler, W.W. Predebon, B.J. Pletka, and G. Subhash, May, pp. 60–63.
PRENGAMAN, R.D. "Recovering Lead from Batteries" (*Overview*), R.D. Prengaman, January, pp. 31–33.
PRUCE, J. Letter to the Editor, June, p. 3.

Q

QUENEAU, P.B. "Production of By-Product Mercury" (*1995 Fall Extractive Meeting Preview: General Recycling*), P.B. Queneau, C.W. Kenney, and B.J. Hansen, October, pp. 24–28.

R

RADACK, D.V. "GATT Brings Major Changes in U.S. Patent Law" (*Material Matters*), D.V. Radack, May, p. 79. <http://www.tms.org/pubs/journals/JOM/matters/matters-9505.html>
RADACK, D.V. "Reading and Understanding Patent Claims" (*Material Matters*), D.V. Radack, November, p. 69. <http://www.tms.org/pubs/journals/JOM/matters/matters-9511.html>
RADACK, D.V. "Understanding Patent Infringement Legal Opinions" (*Material Matters*), D.V. Radack, December, p. 54. <http://www.tms.org/pubs/journals/JOM/matters/matters-9512.html>
RAMACHANDRAN, V. "Recovering Metals from Wastes" (*Industrial Insight*), V. Ramachandran and S.R. Gilbert, February, p. 64.
RAMACHANDRAN, V. "The Treatment and Minimization of Wastes" (*Conference Review*), V. Ramachandran, February, pp. 50–51.
RAMAN, R.V. "The One-Step Synthesis of Dense Titanium-Carbide Tiles" (*Applied Technology*), R.V. Raman, S.V. Rele, S. Poland, J. Lasalvia, M.A. Meyers, and A.R. Niiler, March, pp. 23–25.
RARAZ, A.G. "Biological and Biotechnological Waste Management in Materials Processing" (*Overview*), A.G. Raraz, February, pp. 56–63.
REDDY, R.G. "Light Metals 1995: Advances in Aluminum Production" (*Conference Review*), M.V. Chaubal, R.A. Cheatham, B.J. Sadler, and R.G. Reddy, November, pp. 43–46.
REITZ, W.E. "The Eighth International Conference on Surface Modification Technology" (*Conference Review*), W.E. Reitz, April, pp. 14–15.
RELE, S.V. "The One-Step Synthesis of Dense Titanium-Carbide Tiles" (*Applied Technology*), R.V. Raman, S.V. Rele, S. Poland, J. Lasalvia, M.A. Meyers, and A.R. Niiler, March, pp. 23–25.
RENAUD, J. "Magnesium Castings for Automotive Applications" (*Overview*), A. Luo, J. Renaud, I. Nakatsugawa, and J. Plourde, July, pp. 28–31.
REUCROFT, P.J. Review of the book *Thermodynamics of Materials, Volumes I and II* (*Division News*), April.
RICKER, R.E. "Can Corrosion Testing Make the Transition from Comparison to Prediction?" (*Overview*), R.E. Ricker, September, pp. 32–35.
ROBINSON, J.J. "In the Final Analysis," J.J. Robinson, January–December, p. 2.
ROBINSON, J.J. "Megatrends in Manufacturing IV: Perspectives on Metalworking and the Government's Role" (*Conference Review*), J.J. Robinson, June, pp. 20–21. <http://www.tms.org/pubs/journals/JOM/Robinson-9506.html>
ROBINSON, J.J. "Vox Populi: Examining the Results of the 1994 *JOM* Reader Survey," (*Overview*), J.J. Robinson, January, pp. 10–11.
RODEGHIERO, E.D. "Interconnected Metal-Ceramic Composites by Chemical Means" (*Research Summary*), E.D. Rodeghiero, O.K. Tse, and E.P. Giannelis, March, pp. 26–28.
ROLF, R.L. Review of the book *Introduction to Life Prediction of Industrial Plant Materials: Application of the Extreme Value Method for Corrosion Analysis* (*Forum Features*), September, p. 68.
ROMÁN-MOGUEL, G.J. "Copper Recycling from Waste Pickling Solutions" (*1995 Fall Extractive Meeting Preview: Secondary Copper*), G.J. Román-Moguel, G. Plascencia, J. Pérez, and A. García, October, pp. 18–19.
ROMÁN-MOGUEL, G.J. "Recovering Metals from Hydrometallurgical Residues" (*Research Summary*), M.G. Sánchez Loredo, G.J. Román-Moguel, and F. de J. Carrillo Romo, June, pp. 46–47.
RUNGTA, R. Review of the book *A Working Party Report on Corrosion Inhibitors, European Federation of Corrosion Publications No. 11* (*Forum Features*), September, p. 68.

S

SADLER, B.J. "Light Metals 1995: Advances in Aluminum Production" (*Conference Review*), M.V. Chaubal, R.A. Cheatham, B.J. Sadler, and R.G. Reddy, November, pp. 43–46.
SAMPATH, S. "Plasma-Spray Forming Ceramics and Layered Composites" (*Research Summary*), S. Sampath, R. Gansert, and H. Herman, October, pp. 30–33.
SAN LORENZO, D.M. "Zinc Recycling through the Modified Zincex Process" (*1995 Fall Extractive Meeting Preview: Secondary Zinc*), G. Díaz, D.M. San Lorenzo, and C.L. Gallego, October, pp. 22–23.
SÁNCHEZ LOREDO, M.G. "Recovering Metals from Hydrometallurgical Residues" (*Research Summary*), M.G. Sánchez Loredo, G.J. Román-Moguel, and F. de J. Carrillo Romo, June, pp. 46–47.
SASTRY, S.M.L. "Processing Maps for Optimizing Gas Atomization and Spray Deposition" (*Overview*), S. Hariprasad and S.M.L. Sastry, October, pp. 56–59.
SATO, K-I. "The Bulk Application of High-T_c Superconductors in Japan" (*Overview*), K-I. Sato, August, pp. 65–67.
SCHIFFMAN, R.A. "Why the U.S. Government Should Continue Funding Advanced Technology Programs" (*Opinion*), R.A. Schiffman, June, pp. 14–15.
SCHLESINGER, M.E. "A Sampling of Highlights from the EPD Congress 1995" (*Conference Review*), M.E. Schlesinger, June, pp. 42–45.
SCHLESINGER, M.E. "Coming Soon—An EIT for Metallurgists" (*Material Matters*), M.E. Schlesinger, April, p. 77. <http://www.tms.org/pubs/journals/JOM/matters/matters-9504.html>
SCHLESINGER, M.E. "Is 'No-Choice' the Choice for Future Metallurgical PE Exams?" (*Material Matters*), M.E. Schlesinger, March, p. 63. <http://www.tms.org/pubs/journals/JOM/matters/matters-9503.html>
SCHLESINGER, M.E. "Why Do Engineers Have to Take Registration Exams?" (*Material Matters*), M.E. Schlesinger, June, p. 59. <http://www.tms.org/pubs/journals/JOM/matters/matters-9506.html>
SCHLESINGER, M.E. Review of the book *The First International Congress on Science and Technology of Ironmaking (ICSTI '94)* (*Division News*), April.
SCHMEIL, P.F. "Characterizing Emissions from a Söderberg Aluminum Smelter" (*Research Summary*), B.P. Leber, Jr., and P.F. Schmeil, May, pp. 20–21.
SCHWARTZ, E. "Electromagnetic Levitation—A Useful Tool in Microgravity Research" (*Overview*), J. Szekely, E. Schwartz, and R. Hyers, May, pp. 50–53.
SEARS, J. "The Consolidation Processing of Powder Materials" (*Commentary*), M.G. McKimpson and J. Sears, August, p. 25.
SELVAMANICKAM, V. "Superconductivity Research and Applications Development at IGC" (*Overview*),

R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, and P. Haldar, August, pp. 61–64.

SHAMSI, M.R.R.I. "Casting Al Sheets on a Lab-Scale, Single-Roll, Continuous Sheet Caster" (*Research Summary*), S.P. Mehrotra, M.R.R.I. Shamsi, and P.N. Bid, August, pp. 18–21.

SHANNON, J. LETTER TO THE EDITOR, June, p. 4.

SHIGESATO, Y. "ITO Thin-Film Transparent Conductors: Microstructure and Processing" (*Testing & Analysis*), Y. Shigesato, I. Yasui, and D.C. Paine, March, pp. 47–50.

SILVERMAN, A.B. "Copyright Protection for Engineering Drawings" (*MATERIAL MATTERS*), A.B. Silverman, September, p. 65. <http://www.tms.org/pubs/journals/JOM/matters/matters-9509.html>

SILVERMAN, A.B. "The Relationship Between Basic and Improvement Patents" (*MATERIAL MATTERS*), A.B. Silverman, January, p. 50. <http://www.tms.org/pubs/journals/JOM/matters/matters-9501.html>

SIMONEN, E.P. "Concepts in Preventing the Early Stages of Aqueous Stress-Corrosion Cracking" (*Overview*), R.H. Jones and E.P. Simonen, September, pp. 28–31.

SINGH, J. "Laser Research at Penn State's ARL," Sidebar to "Mechanical Issues in Laser and Abrasive Water Jet Cutting" (*Research Summary*), J. Singh and P. Denney, January, p. 30.

SINGH, J. "Mechanical Issues in Laser and Abrasive Water Jet Cutting" (*Research Summary*), J. Singh and S.C. Jain, January, pp. 28–30.

SINGH, J. "Synthesizing and Processing Advanced Materials" (*Conference Review*), J. Singh and S.M. Copley, March, p. 29.

SJÖBERG, G. "Recycling Aluminum Foil from Post-Consumer Beverage Cartons" (*1995 Fall Extractive Meeting Preview: Aluminum Consumer Packaging*), P. Charlier and G. Sjöberg, October, pp. 12–13.

SMITH, R.W. "Thermal Spraying I: Powder Consolidation—From Coating to Forming" (*Overview*), R.W. Smith and R. Knight, August, pp. 32–39.

SODA, H.G. "Paths of Progress in Liquid Metal Processing" (*1995 Review of Extraction & Processing*), A. McLean, H. Soda, and I.D. Sommerville, April, pp. 67–72.

SOHN, H.Y. "Developments in Physical Chemistry and Basic Principles" (*1995 Review of Extraction & Processing*), H.Y. Sohn and W.D. Cho, April, pp. 60–66.

SOHN, H.Y. "Metallurgical Processes for the Year 2000 and Beyond II: Q & A" (*1995 Review of Extraction & Processing*), H.Y. Sohn, April, pp. 47–52.

SOKOLOWSKI, R.S. "Superconductivity Research and Applications Development at IGC" (*Overview*), R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, and P. Haldar, August, pp. 61–64.

SOLE, K.C. Review of the book *Hydrometallurgy '94* (*Division News*), September.

SOMMERVILLE, I.D. "Paths of Progress in Liquid Metal Processing" (*1995 Review of Extraction & Processing*), A. McLean, H. Soda, and I.D. Sommerville, April, pp. 67–72.

SROLOVITZ, D.J. "The Thermodynamics and Kinetics of Film Agglomeration" (*Tutorial*), D.J. Srolovitz and M.G. Goldiner, March, pp. 31–36, 76–77.

STAEHLER, J.M. "Strain-Rate Effects in High-Purity Alumina" (*Research Summary*), J.M. Staehler, W.W. Predebon, B.J. Pletka, and G. Subhash, May, pp. 60–63.

STERZIK, G. "An Atomization Technique for Upgrading Automotive Al Scrap" (*1995 Fall Extractive Meeting Preview: Secondary Aluminum*), K.P. Olsen, G. Sterzik, and H. Henein, October, pp. 14–15.

STOCK, S.R. "Computed Tomography Part III: Volumetric, High-Resolution X-Ray Analysis of Fatigue Crack Closure" (*Research Summary*), S.R. Stock, A. Guvenilir, T.M. Breunig, J.H. Kinney, and M.C. Nichols, January, pp. 19–23.

STREIT, P. "Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.

SUBHASH, G. "Strain-Rate Effects in High-Purity Alumina" (*Research Summary*), J.M. Staehler, W.W. Predebon, B.J. Pletka, and G. Subhash, May, pp. 60–63.

SUBHASH, G. "The Constitutive Behavior of Refractory Metals as a Function of Strain Rate" (*Research Summary*), G. Subhash, May, pp. 55–58.

SUBRAMANIAN, C. Review of the book *Materials Issues in Machining II and the Physics of Machine Processes II* (*Division News*), August, insert.

SUBRAMANIAN, C. Review of the book *Quenching and Carburising: Proceedings of the Third International Seminar of the International Federation for Heat Treatment and Surface Engineering* (*Division News*), February.

SZEKELY, J. "Electromagnetic Levitation—A Useful Tool in Microgravity Research" (*Overview*), J. Szekely, E. Schwartz, and R. Hyers, May, pp. 50–53.

T

TAKAHASHI, A. "Microalloyed Aluminum for Cryogenic Conductors" (*Research Summary*), L.C. McDonald, K.T. Hartwig, and A. Takahashi, February, pp. 41–43.

TAKAHASHI, J. "Recovering Iron, Manganese, Copper, Cobalt, and High-Purity Nickel from Sea Nodules" (*Research Summary*), T. Kohga, M. Imamura, J. Takahashi, N. Tanaka, and T. Nishizawa, December, pp. 40–43.

TAKEUCHI, E. "Applying MHD Technology to the Continuous Casting of Steel Slab" (*Overview*), E. Takeuchi, May, pp. 42–45.

TALBOT, D.E.J. "Effects of Sodium and Bismuth in Aluminum-Magnesium Alloys" (*Research Summary*), D.E.J. Talbot and D.A. Granger, Feb., pp. 44–46.

TAMHANE, A. "High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G. Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.

TANAKA, N. "Recovering Iron, Manganese, Copper, Cobalt, and High-Purity Nickel from Sea Nodules" (*Research Summary*), T. Kohga, M. Imamura, J. Takahashi, N. Tanaka, and T. Nishizawa, December, pp. 40–43.

TANKINS, E. "The Shipboard Exposure Testing of Aircraft Materials" (*Research Summary*), E. Tankins, J. Kozol, and E.W. Lee, September, pp. 40–44.

TARDY, P. "Engineering Education in a Global Community IV: Hungary and Eastern Europe" (*Education*), P. Tardy, December, p. 48.

TENCH, D.M. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.

TENSI, H.M. "Optimizing the Corrosion Fatigue Properties of Co-Cr-Mo Hip Joints" (*Research Summary*), H.M. Tensi, H. Hooputra, W. Weinfurtner, and H. Mayr, January, pp. 25–27.

THOMAS, J.C. "The Influence of Coke Source on Anode Performance" (*Research Summary*), C. Jonville, J.C. Thomas, and C. Dreyer, August, pp. 23–24.

TOTURA, G.T. "The Role of Hydrometallurgy in Treating Nuclear Waste" (*Overview*), M.J. Gula, G.T. Totura, and L. Jassin, September, pp. 54–57.

TSE, O.K. "Interconnected Metal-Ceramic Composites by Chemical Means" (*Research Summary*), E.D. Rodeghiero, O.K. Tse, and E.P. Giannelis, March, pp. 26–28.

TU, C.W. "Molecular-Beam Epitaxy and Related Growth Techniques" (*Overview*), C.W. Tu, December, pp. 34–37.

TU, J.S. "An Integrated Procedure for Modeling Investment Castings" (*Overview*), J.S. Tu, R.K. Foran, A.M. Hines, and P.R. Aimone, October, pp. 64–68.<http://www.tms.org/pubs/journals/JOM/9510/Tu-9510.html>

TURCHI, P.E.A. Review of the book *Surface Phases on Silicon: Preparation, Structures, and Properties* (*FORUM Features*), December, p. 55.

U

UME, C. "Characterizing the Temperature Dependence of Electronic Packaging-Material Properties" (*Testing & Analysis*), C.-Y. Fu and C. Ume, June, pp. 31–35.

UPADHYAYA, A. "Liquid-Phase Sintering under Microgravity Conditions" (*Overview*), R.M. German, R.G. Iacocca, J.L. Johnson, Y. Liu, and A. Upadhyaya, August, pp. 46–48.

V

VAN TYNE, C.J. "The Sensitivity of Lab-Measured Friction Coefficients" (*Testing & Analysis*), J.P. Haruff, C.J. Van Tyne, and D.K. Matlock, July, pp. 50–52.

VARDAVOULIAS, M. "Using Coated Ceramic Particles to Increase Wear Resistance in High-Speed Steels" (*Research Summary*), C. Jouanny-Tresy, M. Vardavoulias, and M. Jeandin, April, pp. 26–30.

VENIE, M.S. "The Increasing Use of Aluminum in Automotive Applications" (*Overview*), K.R. Brown, M.S. Venie, and R.A. Woods, July, pp. 20–23.

VISWANATHAN, S. "The Role of Solidification in Products and Processes" (*Commentary*), S. Viswanathan, February, p. 37.

W

WALKER, M.S. "Superconductivity Research and Applications Development at IGC" (*Overview*), R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, and P. Haldar, August, pp. 61–64.

WALLIS, R.A. "Predicting Residual Stresses in Gas Turbine Components" (*Research Summary*), R.A. Wallis and I.W. Craighead, October, pp. 69–71.

WARREN, G.W. "Are Your Technical Journals an Endangered Species?" (*Economics*), G.W. Warren and K. Gessesse, January, pp. 12–13.

WEIHRAUCH, P.F. "The Commercial Application of Low-Cost Titanium Composites" (*Overview*), S. Abkowitz, P.F. Weihrauch, S.M. Abkowitz, and H.L. Heussi, August, pp. 40–41.

WEINFURTNER, W. "Optimizing the Corrosion Fatigue Properties of Co-Cr-Mo Hip Joints" (*Research Summary*), H.M. Tensi, H. Hooputra, W. Weinfurtner, and H. Mayr, January, pp. 25–27.

WELCH, B.J. "Interfacial Processes and the Performance of Cathode Linings in Aluminum Smelters" (*Research Summary*), B.J. James, B.J. Welch, M.M. Hyland, J.B. Metson, and C.D. Morrison, February, pp. 22–25.

WESSELS, B. "From the Division Chair" (*Division News*), B. Wessels, March.

WESSELS, B.W. "A Letter to the Membership" (*TMS News*), B.W. Wessels, November, p. 65.

WHITE, J. "A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.

WIKSWO, J.P., Jr. "Detecting In-Situ Active Corrosion by a SQUID Magnetometer" (*Research Summary*), D. Li, Y. Ma, W.F. Flanagan, B.D. Lichter, and J.P. Wikswo, Jr., September, pp. 36–39.

WILSON, C. "I'm at Your Service—Customer Services Coordinator" (*TMS News*), C. Wilson, October, p. 74.

WINNARD, E. "High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G.

Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.
WINSA, E.A. "The Chronology of a Microgravity Spaceflight Experiment: IDGE" (*Overview*), M.E. Glicksman, M.B. Koss, and E.A. Winsa, August, pp. 49–54. <http://www.tms.org/pubs/journals/JOM/Glicksman-9508.html>
WINTERBOTTOM, W.L. "Materials, Processing, and Reliability Issues for PWB Assemblies" (*Commentary*), D.R. Frear and W.L. Winterbottom, June, p. 26.
WOODS, R.A. "The Increasing Use of Aluminum in Automotive Applications" (*Overview*), K.R. Brown, M.S. Venie, and R.A. Woods, July, pp. 20–23.

X

XIAO, C. "Coating Ceramic Composites by a Laser In-Situ Reaction Technique" (*Research Summary*), N.B. Dahotre, C. Xiao, W. Boss, M.H. McCay, and T.D. McCay, October, pp. 51–53.

Y

YACAMÁN, M.J. "Engineering Education in a Global Technical Community" (*Conference Review*), C.J. McHargue and M.J. Yacamán, July, pp. 14–16.
YACAMÁN, M.J. "Metallurgy and Materials Research in Mexico" (*Forum International*), M.J. Yacamán, January, pp. 52–53.
YARAR, B. "Recovering Plastics for Recycling by Mineral Processing Techniques" (*Overview*), R. Buchan and B. Yarar, February, pp. 52–55.
YASUI, I. "ITO Thin-Film Transparent Conductors: Microstructure and Processing" (*Testing & Analysis*), Y. Shigesato, I. Yasui, and D.C. Paine, March, pp. 47–50.
YENER, K.A. "Silver and Copper Artifacts from Ancient Anatolia" (*Archaeotechnology*), K.A. Yener, P. Jett, and A. Adriaens, May, pp. 70–72.

Z

ZAVALIANGOS, A. "The Transient Plastic Phase Processing of Ceramic-Ceramic Composites" (*Overview*), M. Barsoum, A. Zavaliangos, S. Kalidindi, T. El-Raghy, and D. Brodkin, November, pp. 52–55.
ZHUXIAN, Q. "Key Improvements to Hall-Héroult Since the End of World War II" (*Overview*), K. Grjotheim, H. Kvande, and Q. Zhuxian, November, pp. 32–35.

SUBJECT INDEX — JANUARY–DECEMBER 1995

Aluminum

"An Atomization Technique for Upgrading Automotive Al Scrap" (*1995 Fall Extractive Meeting Preview: Secondary Aluminum*), K.P. Olsen, G. Sterzik, and H. Henein, October, pp. 14–15.
"Carbon Cathode Materials: Approval and Quality Control Procedures" (*Overview*), H.A. Øye, February, pp. 14–18, 21.
"Casting Al Sheets on a Lab-Scale, Single-Roll, Continuous Sheet Caster" (*Research Summary*), S.P. Mehrotra, M.R.R.I. Shamsi, and P.N. Bid, August, pp. 18–21.
"Characterizing Emissions from a Söderberg Aluminum Smelter" (*Research Summary*), B.P. Leber, Jr., and P.F. Schmeil, May, pp. 20–21.
"Effects of Sodium and Bismuth in Aluminum-Magnesium Alloys" (*Research Summary*), D.E.J. Talbot and D.A. Granger, February, pp. 44–46.
"The Electromagnetic Filtration of Molten Aluminum Using an Induced-Current Separator" (*Research Summary*), N. El-Kaddah, A.D. Patel, and T.T. Natarajan, May, pp. 46–49.
"Electrochemical Magnesium Sensors for Use in Aluminum Processing" (*Overview*), J.W. Fergus, November, pp. 36–40.
"Events and Trends in Metal and Mineral Commodities" (*1995 Review of Extraction & Processing*), M.C. Munson, April, pp. 54–58.
"Forecasting Trends in Al Manufacturing and Marketing" (*Industrial Insight*), T.M. Beazley, November, pp. 26–27.
"Forming and Bonding Techniques for High-Strength Aluminum Alloys" (*Overview*), H.E. Friedrich, February, pp. 33–35.
"High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G. Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.
"The Increasing Use of Aluminum in Automotive Applications" (*Overview*), K.R. Brown, M.S. Venie, and R.A. Woods, July, pp. 20–23.
"The Influence of Coke Source on Anode Performance" (*Research Summary*), C. Jonville, J.C. Thomas, and C. Dreyer, August, pp. 23–24.
"Interfacial Processes and the Performance of Cathode Linings in Aluminum Smelters" (*Research Summary*), B.J. James, B.J. Welch, M.M. Hyland, J.B. Metson, and C.D. Morrison, February, pp. 22–25.
"Issues in the Melting and Reclamation of Aluminum Scrap" (*Overview*), R.D. Peterson, February, pp. 27–29.
"Key Improvements to Hall-Héroult Since the End of World War II" (*Overview*), K. Grjotheim, H. Kvande, and Q. Zhuxian, November, pp. 32–35.
"Lifetime Costing of the Body-in-White: Steel vs. Aluminum" (*Overview*), H.N. Han and J.P. Clark, May, pp. 22–28.
"Light Metals 1995: Advances in Aluminum Production" (*Conference Review*), M.V. Chaubal, R.A. Cheatham, B.J. Sadler, and R.G. Reddy, November, pp. 43–46.
"Microalloyed Aluminum for Cryogenic Conductors" (*Research Summary*), L.C. McDonald, K.T. Hartwig, and A. Takahashi, February, pp. 41–43.
"Modification of Al-Si Alloys: Microstructure, Thermal Analysis, and Mechanisms" (*Overview*), S.-Z. Lu and A. Hellawell, February, pp. 38–40.
"The Point of a Monument: A History of the Aluminum Cap of the Washington Monument" (*Featured Overview*), G.J. Binczewski, November, pp. 20–25. <http://www.tms.org/pubs/journals/JOM/9511/Binczewski-9511.html>
"Producing Thin Strips by Twin-Roll Casting—Part I: Process Aspects and Quality Issues" (*Overview*), B.Q. Li, May, pp. 29–33.
"Producing Thin Strips by Twin-Roll Casting—Part II: Process Modeling and Development" (*Overview*), B.Q. Li, August, pp. 13–17.
"The Production of Ultrahigh-Purity Copper for Advanced Applications" (*Overview*), M. Kato, December, pp. 44–46.
"Recycling Al-Si Alloys from Spacecraft Accessories" (*1995 Fall Extractive Meeting Preview: Secondary Aluminum*), P.C. Olaru, October, p. 16.
"Recycling Aluminum Foil from Post-Consumer Beverage Cartons" (*1995 Fall Extractive Meeting Preview: Aluminum Consumer Packaging*), P. Charlier and G. Sjöberg, October, pp. 12–13.
"Relating the Debye Temperature and Structural Stability of Rapidly Solidified Al Alloys" (*Research Summary*), R. Dasgupta and S.K. Bose, March, pp. 20–22.
"The Russian Al Industry's Difficult Transition to a Market Economy" (*Overview*), S.C. Manaktala, May, pp. 14–18.
"Synthesizing Aluminum Alloys by Double Mechanical Alloying" (*Research Summary*), L. Froyen, L. Delaey, X.P. Niu, P. Le Brun, and C. Peytour, March, pp. 16–19.
"The Use of Electromagnetic Casting for Al Alloys and Other Metals" (*Overview*), J.W. Evans, May, pp. 38–41.
"The World Aluminum Industry: Status and Prospects for 1996" (*Economics*), B.I. Arlyuk, November, pp. 29–30.

Aqueous Processing

Developments in Physical Chemistry and Basic Principles" (*1995 Review of Extraction & Processing*), H.Y. Sohn and W.D. Cho, April, pp. 60–66.
"The Production of Ultrahigh-Purity Copper for Advanced Applications" (*Overview*), M. Kato, December, pp. 44–46.
"Recovering Flake Graphite from Steelmaking Kish" (*Research Summary*), L.J. Nicks, F.H. Nehl, and M.F. Chambers, June, pp. 48–51.
"Recovering Lead from Batteries" (*Overview*), R.D. Prengaman, January, pp. 31–33.
"Recovering Metals from Hydrometallurgical Residues" (*Research Summary*), M.G. Sánchez Loredo, G.J. Román-Moguel, and F. de J. Carrillo Romo, June, pp. 46–47.
"Remediating Heavy Metals, Radionuclides, and Organic Pollutants from Soils" (*Overview*), M. Misra and R.K. Mehta, September, pp. 45–53.
"The Role of Hydrometallurgy in Treating Nuclear Waste" (*Overview*), M.J. Gula, G.T. Totura, and L. Jassin, September, pp. 54–57.

Archaeotechnology & History

"The Analysis of Ancient Glasses Part I: Materials, Properties, and Early European Glass" (*Archaeotechnology*), J. Henderson, November, pp. 62–64.
"The Armored Warriors of Kaya" (*Archaeotechnology*), Y. Pak, January, pp. 38–39.
"The Development of Plumbate Ceramic Ware in Southern Mesoamerica" (*Archaeotechnology*), H. Neff, March, pp. 52–56.
"A Hopi Tradition: Yellow Firing Ceramics" (*Archaeotechnology*), V. Canouts and R. Bishop, September, pp. 58–59.
"The Point of a Monument: A History of the Aluminum Cap of the Washington Monument" (*Featured Overview*), G.J. Binczewski, November, pp. 20–25. <http://www.tms.org/pubs/journals/JOM/9511/Binczewski-9511.html>
"*Retrospect*," D.F. Hasson, January, p. 64; February, p. 84; March, p. 80; April, p. 88; May, p. 88; June, p. 72; July, p. 68; August, p. 84; September, p. 76; October, p. 88; November, p. 84; December, p. 80.
"Silver and Copper Artifacts from Ancient Anatolia" (*Archaeotechnology*), K.A. Yener, P. Jett, and A. Adriaens, May, pp. 70–72.

Book Reviews

The First International Congress on Science and Technology of Ironmaking (ICSTI '94) (*Division News*), April.
A History of Metallurgy (*Forum Features*), Dec., p. 55.
Hydrometallurgy '94 (*Division News*), September.
Integrating Reliability into Microelectronics Manufacturing (*Forum Features*), September, p. 68.
Instructor's Manual: Engineering Materials Technology (*Forum Features*), December, p. 55.
Introduction to Life Prediction of Industrial Plant Materials: Application of the Extreme Value Method for Corrosion Analysis (*Forum Features*), Sept., p. 68.
Materials Issues in Machining II and the Physics of Machine Processes II (*Division News*), August.
Modern Grinding Process Technology (*Division News*),

February, insert.

Phase Transformations and Ablation in Laser-Treated Solids (*Forum Features*), September, p. 68.

Problems of Technological Plasticity (*Division News*), August.

Progress in the Understanding and Prevention of Corrosion (*Division News*), January.

Quenching and Carburising: Proceedings of the Third International Seminar of the International Federation for Heat Treatment and Surface Engineering (*Division News*), February.

Rapidly Solidified Alloys—Processes, Structures, Properties, Applications (*Division News*), February.

Structure and Properties of Ceramics, Volume 11 (*Division News*), June.

Surface Phases on Silicon: Preparation, Structures, and Properties (*Forum Features*), December, p. 55.

Techniques and Mechanisms in Electrochemistry (*Division News*), September.

Techniques in Rheological Measurement (*Forum Features*), September, p. 68.

Thermodynamics of Materials, Volumes I and II (*Division News*), April.

A Working Party Report on Corrosion Inhibitors, European Federation of Corrosion Publications No. 11 (*Forum Features*), September, p. 68.

Characterization

"Characterizing the Microstructure of Interfaces in Y-123 Thin Films" (*Testing & Analysis*), A.F. Marshall, March, pp. 43–46.

"Computed Tomography Part III: Volumetric, High-Resolution X-Ray Analysis of Fatigue Crack Closure" (*Research Summary*), S.R. Stock, A. Guvenilir, T.M. Breunig, J.H. Kinney, and M.C. Nichols, January, pp. 19–23.

"Effects of Oxygen on the Solidification Microstructure of $LaNi_5$" (*Research Summary*), T.W. Ellis, L.L. Jones, and T.E. Bloomer, February, pp. 47–49.

"Effects of Sodium and Bismuth in Aluminum-Magnesium Alloys" (*Research Summary*), D.E.J. Talbot and D.A. Granger, February, pp. 44–46.

"ITO Thin-Film Transparent Conductors: Microstructure and Processing" (*Testing & Analysis*), Y. Shigesato, I. Yasui, and D.C. Paine, March, pp. 47–50.

"Microalloyed Aluminum for Cryogenic Conductors" (*Research Summary*), L.C. McDonald, K.T. Hartwig, and A. Takahashi, February, pp. 41–43.

"Modification of Al-Si Alloys: Microstructure, Thermal Analysis, and Mechanisms" (*Overview*), S.-Z. Lu and A. Hellawell, February, pp. 38–40.

"A New Paradigm—Multi-User Scanning Electron Microscopy" (*Featured Overview*), L.S. Chumbley, M. Meyer, K. Fredrickson, and F.C. Laabs, September, pp. 13–17. <http://www.tms.org/pubs/journals/JOM/9509/Chumbley-9509.html>

"Recent Developments in the Application of Process Mineralogy" (*1995 Review of Extraction & Processing*), R.D. Hagni, April, p. 46.

"Relating the Debye Temperature and Structural Stability of Rapidly Solidified Al Alloys" (*Research Summary*), R. Dasgupta and S.K. Bose, March, pp. 20–22.

"Using Fractal Analysis to Describe Irregular Microstructures" (*Overview*), S.-Z. Lu and A. Hellawell, December, pp. 14–17.

Composite Materials

"Ceramic-Matrix Composites Fatigue and Fracture" (*Research Summary*), D.L. Davidson, October, pp. 46–50, 81–82.

"Coating Ceramic Composites by a Laser In-Situ Reaction Technique" (*Research Summary*), N.B. Dahotre, C. Xiao, W. Boss, M.H. McCay, and T.D. McCay, October, pp. 51–53.

"Continuous-Fiber Reinforced Al Composites: A New Generation" (*Overview*), H.E. Deve and C. McCullough, July, pp. 33–37.

"Expanding the Application of Ceramic-Matrix Composites" (*Commentary*), P.K. Liaw, October, p. 29.

"Fiber-Reinforced CMCs: Processing, Mechanical Behavior, and Modeling" (*Overview*), P.K. Liaw, October, pp. 38–44.

"Interconnected Metal-Ceramic Composites by Chemical Means" (*Research Summary*), E.D. Rodeghiero, O.K. Tse, and E.P. Giannelis, March, pp. 26–28.

"Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.

"Plasma-Spray Forming Ceramics and Layered Composites" (*Research Summary*), S. Sampath, R. Gansert, and H. Herman, October, pp. 30–33.

"Processing Ceramic-Matrix Composites Using Electrophoretic Deposition" (*Research Summary*), A.R. Boccaccini and C.B. Ponton, October, pp. 34–37.

"The Commercial Application of Low-Cost Titanium Composites" (*Overview*), S. Abkowitz, P.F. Weihrauch, S.M. Abkowitz, and H.L. Heussi, August, pp. 40–41.

"The Failure of Fiber-Reinforced Ceramic-Matrix Composites Under Dynamic Loading" (*Research Summary*), J. Lankford, May, pp. 64–68.

"The High-Temperature Application of Ceramic-Matrix Composites" (*Overview*), K.K. Chawla, December, pp. 19–21.

"The Transient Plastic Phase Processing of Ceramic-Ceramic Composites" (*Overview*), M. Barsoum, A. Zavaliangos, S. Kaliidindi, T. El-Raghy, and D. Brodkin, November, pp. 52–55.

"Using Coated Ceramic Particles to Increase Wear Resistance in High-Speed Steels" (*Research Summary*), C. Jouanny-Tresy, M. Vardavoulias, and M. Jeandin, April, pp. 26–30.

Conference Reviews

"The Eighth International Conference on Surface Modification Technology" (*Conference Review*), W.E. Reitz, April, pp. 14–15.

"Engineering Education in a Global Technical Community" (*Conference Review*), C.J. McHargue and M.J. Yacamán, July, pp. 14–16.

"Gamma Titanium Aluminides" (*Conference Review*), Y.-W. Kim, July, p. 38.

"The Impact of the New Congress on U.S. Materials Policy" (*Conference Review*), R.A. Laudise, June, pp. 12–13.

"Light Metals 1995: Advances in Aluminum Production" (*Conference Review*), M.V. Chaubal, R.A. Cheatham, B.J. Sadler, and R.G. Reddy, November, pp. 43–46.

"Magnesium and Other Reactive Metals: Have They Matured?" (*Conference Preview*), G.J. Kipouros, December, pp. 38–39.

"Megatrends in Manufacturing IV: Perspectives on Metalworking and the Government's Role" (*Conference Review*), J.J. Robinson, June, pp. 20–21. <http://www.tms.org/pubs/journals/JOM/Robinson-9506.html>

"Metallurgical Processes for the Year 2000 and Beyond II: Q & A" (*1995 Review of Extraction & Processing*), H.Y. Sohn, April, pp. 47–52.

"Recent Developments in the Application of Process Mineralogy" (*1995 Review of Extraction & Processing*), R.D. Hagni, April, p. 46.

"A Sampling of Highlights from the EPD Congress 1995" (*Conference Review*), M.E. Schlesinger, June, pp. 42–45.

"Synthesizing and Processing Advanced Materials" (*Conference Review*), J. Singh and S.M. Copley, March, p. 29.

"The Treatment and Minimization of Wastes" (*Conference Review*), V. Ramachandran, February, pp. 50–51.

"The Workshop on Advanced Sintered Materials" (*Conference Review*), F.H. Froes, January, pp. 14–15.

Copper, Nickel, Cobalt

"A New, Third-Generation, Single-Crystal, Casting Superalloy" (*Overview*), G.L. Erickson, April, pp. 36–39.

"Copper Recycling from Waste Pickling Solutions" (*1995 Fall Extractive Meeting Preview: Secondary Copper*), G.J. Román-Moguel, G. Plascencia, J. Pérez, and A. García, October, pp. 18–19.

"Events and Trends in Metal and Mineral Commodities" (*1995 Review of Extraction & Processing*), M.C. Munson, April, pp. 54–58.

"The Production of Ultrahigh-Purity Copper for Advanced Applications" (*Overview*), M. Kato, December, pp. 44–46.

"Recovering Iron, Manganese, Copper, Cobalt, and High-Purity Nickel from Sea Nodules" (*Research Summary*), T. Kohga, M. Imamura, J. Takahashi, N. Tanaka, and T. Nishizawa, December, pp. 40–43.

Corrosion & Environmental Effects

"Can Corrosion Testing Make the Transition from Comparison to Prediction?" (*Overview*), R.E. Ricker, September, pp. 32–35.

"A Clearer View of How Crevice Corrosion Occurs" (*Overview*), B. De Force and H. Pickering, September, pp. 22–27.

"Computed Tomography Part III: Volumetric, High-Resolution X-Ray Analysis of Fatigue Crack Closure" (*Research Summary*), S.R. Stock, A. Guvenilir, T.M. Breunig, J.H. Kinney, and M.C. Nichols, January, pp. 19–23.

"Concepts in Preventing the Early Stages of Aqueous Stress-Corrosion Cracking" (*Overview*), R.H. Jones and E.P. Simonen, September, pp. 28–31.

"Detecting In-Situ Active Corrosion by a SQUID Magnetometer" (*Research Summary*), D. Li, Y. Ma, W.F. Flanagan, B.D. Lichter, and J.P. Wikswo, Jr., September, pp. 36–39.

"The Effect of Surface Modification on Fretting Fatigue in Ti Alloy Turbine Components" (*Research Summary*), S. Chakravarty, R.G. Andrews, P.C. Painaik, and A.K. Koul, April, pp. 31–35.

"A New, Third-Generation, Single-Crystal, Casting Superalloy" (*Overview*), G.L. Erickson, April, pp. 36–39.

"Optimizing the Corrosion Fatigue Properties of Co-Cr-Mo Hip Joints" (*Research Summary*), H.M. Tensi, H. Hooputra, W. Weinfurtner, and H. Mayr, January, pp. 25–27.

"The Shipboard Exposure Testing of Aircraft Materials" (*Research Summary*), E. Tankins, J. Kozol, and E.W. Lee, September, pp. 40–44.

Deformation & Fracture

"Ceramic-Matrix Composites Fatigue and Fracture" (*Research Summary*), D.L. Davidson, October, pp. 46–50, 81–82.

"The Constitutive Behavior of Refractory Metals as a Function of Strain Rate" (*Research Summary*), G. Subhash, May, pp. 55–58.

"The Failure of Fiber-Reinforced Ceramic-Matrix Composites Under Dynamic Loading" (*Research Summary*), J. Lankford, May, pp. 64–68.

"The High-Strain-Rate Deformation and Fracture of Materials" (*Commentary*), B. Pletka, May, p. 54.

"Strain-Rate Effects in High-Purity Alumina" (*Research Summary*), J.M. Staehler, W.W. Predebon, B.J. Pletka, and G. Subhash, May, pp. 60–63.

Division News

"Committees Offer A Wealth of Activities" (*EPD Edition*), September.

"Darrel Frear Becomes New Chair of the EMPMD" (*EMPMD Edition*), October.

"Delegates Meet at Electronic Materials Summit" (*EMPMD Edition*), October.

"Division Seeks Nominations for Open Council Posi-

tions" (*EMPMD Edition*), October.
"Electrical and Electronics Professionals Head South in June for the 37th Electronic Materials Conference" (*EMPMD Edition*), March.
"Electronic Materials Committee Distributes Knowledge through Conferences and Publication" (*EMPMD Edition*), March.
"Electronic Packaging and Interconnection Materials Committee Addresses Future Materials Needs" (*EMPMD Edition*), October.
"EMPMD Participates in TMS/JIM Joint Meeting" (*EMPMD Edition*), March.
"EMPMD Solicits Candidates for John Bardeen Award" (*EMPMD Edition*), October.
"EMPMD Young Leaders Committee Consolidates with Other Divisions" (*EMPMD Edition*), March.
"EPD Council Highlights" (*EPD Edition*), April.
"EPD Prospers in 1994; Sets Operating Plan for 1995" (*EPD Edition*), April.
"EPD Sponsors 13 Symposia at Annual Meeting" (*EPD Edition*), April.
"EPD/LMD Recycling Committee Organizes TMS Extraction & Processing Symposium" (*EPD Edition*), September.
"Fall Extractive Meeting Scheduled in Southern Resort" (*Special Edition*), July.
"From the Division Chair" (*EMPMD Edition*), B. Wessels, March.
"From the MDMD Chair" (*MDMD Edition*), P. Follansbee, August.
"George Haymaker Speaks at the LMD Luncheon" (*LMD Edition*), November.
"Honors & Professional Recognition Committee Approves Two New LMD Awards" (*LMD Edition*), May.
"LMD Council Meets During 1995 TMS Annual Meeting" (*LMD Edition*), May.
"LMD Honors Award Recipients at Annual Meeting Luncheon" (*LMD Edition*), May.
"LMD Member Pioneers Research into the Point of the Washington Monument" (*LMD Edition*), November.
"LMD Plans Four Short Courses for Engineering Professionals" (*Special Edition*), December.
"MDMD Awards Powder Metallurgy Student Presentation Awards" (*MDMD Edition*), August.
"MDMD Council Meets at Materials Week '94" (*MDMD Edition*), February.
"MDMD Sponsors 4th Megatrends in Manufacturing Symposium this Month" (*MDMD Edition*), February.
"Megatrends in Manufacturing Symposium Grows in Scope for 1996" (*MDMD Edition*), August.
"Past MDMD Chair Earns Presidential Nomination" (*MDMD Edition*), August.
Review of the book *Hydrometallurgy '94* (*EPD Edition*), September.
Review of the book *Materials Issues in Machining II and the Physics of Machine Processes II* (*MDMD Edition*), August.
Review of the book *Modern Grinding Process Technology* (*MDMD Edition*), February.
Review of the book *Problems of Technological Plasticity* (*MDMD Edition*), August.
Review of the book *Progress in the Understanding and Prevention of Corrosion* (*SMD Edition*), January.
Review of the book *Quenching and Carburising: Proceedings of the Third International Seminar of the International Federation for Heat Treatment and Surface Engineering* (*MDMD Edition*), February.
Review of the book *Rapidly Solidified Alloys—Processes, Structures, Properties, Applications* (*MDMD Edition*), February.
Review of the book *Structure and Properties of Ceramics, Volume 11* (*SMD Edition*), June.
Review of the book *Techniques and Mechanisms in Electrochemistry* (*EPD Edition*), September.
Review of the book *The First International Congress on Science and Technology of Ironmaking (ICSTI '94)* (*EPD Edition*), April.
Review of the book *Thermodynamics of Materials, Volumes I and II* (*EPD Edition*), April.
Review of the software *Optimatr™* (*EMPMD Edition*), October.
"Rodney D. Zabreznik Becomes New Chair of the LMD" (*LMD Edition*), November.
"SMD Council Meets at 1995 TMS Annual Meeting" (*SMD Edition*), June.
"SMD Council Meets at Materials Week '94" (*SMD Edition*), January.
"SMD Members Represent TMS at Composites Meeting in Bangalore" (*SMD Edition*), June.
"SMD Organizes 13 Symposia for Materials Week '95" (*SMD Edition*), June.
"SMD Plans Symposia for the Annual Meeting" (*SMD Edition*), January.
"Speakers Announced for Two Technical Divison Luncheons" (*Special Edition*), December.
"Technical Division Programming at TMS Annual Meeting Offers Something for Everyone" (*Special Edition*), December.
"TMS Divisions Offer a Plethora of Programming at Materials Week" (*Special Edition*), July.
"Upcoming Confrerences of Note to LMD Members" (*LMD Edition*), November.

Economics

"AAES Reports the Engineering Salary Trends of 1994" (*Professional Affairs*), T.M. Beazley, May, pp. 12–13. <http://www.tms.org/pubs/journals/JOM/Beazley-9505.html>
"Are Your Technical Journals an Endangered Species?" (*Economics*), G.W. Warren and K. Gessesse, January, pp. 12–13.
"Developments in the Global Mg Market" (*Economics*), D.M. Magers, July, p. 26.
"Growth Continues for Diamond, DLC, and CBN Markets" (*Economics*), T. Abraham, November, p. 60.
"Lifetime Costing of the Body-in-White: Steel vs. Aluminum" (*Overview*), H.N. Han and J.P. Clark, May, pp. 22–28.
"Magnets and Magnetic Materials: A Technical Economic Analysis" (*Economics*), T. Abraham, January, pp. 16–18.
"Production of By-Product Mercury" (*1995 Fall Extractive Meeting Preview: General Recycling*), P.B. Queneau, C.W. Kenney, and B.J. Hansen, October, pp. 24–28.
"The Russian Al Industry's Difficult Transition to a Market Economy" (*Overview*), S.C. Manaktala, May, pp. 14–18.
"Strategically Integrated Partnerships for Materials and Auto Producers" (*Industrial Insight*), P.R. Bridenbaugh, July, pp. 18–19.
"The World Aluminum Industry: Status and Prospects for 1996" (*Economics*), B.I. Arlyuk, November, pp. 29–30.

Education

"Coming Soon—An EIT for Metallurgists" (*Material Matters*), M.E. Schlesinger, April, p. 77. <http://www.tms.org/pubs/journals/JOM/matters/matters-9504.html>
"Engineering Education in a Global Technical Community" (*Conference Review*), C.J. McHargue and M.J. Yacamán, July, pp. 14–16.
"Engineering Education in a Global Community I: Japan" (*Education*), T. Kishi, August, p. 68.
"Engineering Education in a Global Community II: Canada" (*Education*), A. Meisen, September, pp. 18–21.
"Engineering Education in a Global Community III: China" (*Education*), C. Baolu and L. Fuqi, November, p. 61.
"Engineering Education in a Global Community IV: Hungary and Eastern Europe" (*Education*), P. Tardy, December, p. 48.
"Is 'No-Choice' the Choice for Future Metallurgical PE Exams?" (*Material Matters*), M.E. Schlesinger, March, p. 63. <http://www.tms.org/pubs/journals/JOM/matters/matters-9503.html>
"Metallurgy and Materials Research in Mexico" (*Forum International*), M.J. Yacamán, January, pp. 52–53.
"A New Paradigm—Multi-User Scanning Electron Microscopy" (*Featured Overview*), L.S. Chumbley, M. Meyer, K. Fredrickson, and F.C. Laabs, September, pp. 13–17. <http://www.tms.org/pubs/journals/JOM/9509/Chumbley-9509.html>
"Why Do Engineers Have to Take Registration Exams?" (*Material Matters*), M.E. Schlesinger, June, p. 59. <http://www.tms.org/pubs/journals/JOM/matters/matters-9506.html>

Electromagnetic Processing

"Applying MHD Technology to the Continuous Casting of Steel Slab" (*Overview*), E. Takeuchi, May, pp. 42–45.
"The Electromagnetic Filtration of Molten Aluminum Using an Induced-Current Separator" (*Research Summary*), N. El-Kaddah, A.D. Patel, and T.T. Natarajan, May, pp. 46–49.
"Electromagnetic Levitation—A Useful Tool in Microgravity Research" (*Overview*), J. Szekely, E. Schwartz, and R. Hyers, May, pp. 50–53.
"Materials Processing with High Direct-Current Magnetic Fields" (*Overview*), P. Gillon, May, pp. 34–37.
"The Use of Electromagnetic Casting for Al Alloys and Other Metals" (*Overview*), J.W. Evans, May, pp. 38–41.

Electronic Materials

"Characterizing the Temperature Dependence of Electronic Packaging-Material Properties" (*Testing & Analysis*), C.-Y. Fu and C. Ume, June, pp. 31–35.
"Experts Consider the Future of Electronic Materials" (*Forum Roundtable*), March, pp. 64–65.
"Epitaxy: The Key to High-Performance Semiconductor Devices" (*Commentary*), J.M. Parsey, Jr., December, p. 24.
"From Research to Manufacture—The Evolution of MOCVD" (*Overview*), P. Grodzinski, S.P. DenBaars, and H.C. Lee, December, pp,. 25–31.
"ITO Thin-Film Transparent Conductors: Microstructure and Processing" (*Testing & Analysis*), Y. Shigesato, I. Yasui, and D.C. Paine, March, pp. 47–50.
"Materials, Processing, and Reliability Issues for PWB Assemblies" (*Commentary*), D.R. Frear and W.L. Winterbottom, June, p. 26.
"Microalloyed Aluminum for Cryogenic Conductors" (*Research Summary*), L.C. McDonald, K.T. Hartwig, and A. Takahashi, February, pp. 41–43.
"The Modeling of Interfaces: Atoms or Continua?" (*Tutorial*), R. Phillips, March, pp. 37–42, 74–75.
"Molecular-Beam Epitaxy and Related Growth Techniques" (*Overview*), C.W. Tu, December, pp. 34–37.
"The Multichip Module as a Board-Level Package" (*Overview*), D.B. Knorr, June, pp. 27–30.
"A New Reduced-Oxide Soldering Activation Method" (*Research Summary*), D.M. Tench, D.P. Anderson, P. Jambazian, P. Kim, J. White, D. Hillman, G.K. Lucey, T. Gher, and B. Piekarski, June, pp. 36–41.
"The Thermodynamics and Kinetics of Film Agglomeration" (*Tutorial*), D.J. Srolovitz and M.G. Goldiner, March, pp. 31–36, 76–77.
"Thin Films and Interfaces: Modeling and Characterization" (*Commentary*), D.C. Paine, March, p. 30.

Government & Policy

"Critical Issues in the Reform of the Mining Law in the United States" (*1995 Review of Extractive Metallurgy*), April, pp. 44–45.
"GATT Brings Major Changes in U.S. Patent Law" (*Material Matters*), D.V. Radack, May, p. 79.
"The Impact of the New Congress on U.S. Materials

Policy" (*Conference Review*), R.A. Laudise, June, pp. 12–13.
"The Journal Talks with Congress's Robert S. Walker and George E. Brown, Jr." (*Interview*), June, pp. 16–19.
"The Journal Talks with U.S. Bureau of Mines Director Rhea L. Graham" (*1995 Review of Extractive Metallurgy*), April, pp. 42–43.
"Megatrends in Manufacturing IV: Perspectives on Metalworking and the Government's Role" (*Conference Review*), J.J. Robinson, June, pp. 20–21. <http://www.tms.org/pubs/journals/JOM/Robinson-9506.html>
"Why the U.S. Government Should Continue Funding Advanced Technology Programs" (*Opinion*), R.A. Schiffman, June, pp. 14–15.

Iron & Steel

"Applying MHD Technology to the Continuous Casting of Steel Slab" (*Overview*), E. Takeuchi, May, pp. 42–45.
"Events and Trends in Metal and Mineral Commodities" (*1995 Review of Extraction & Processing*), M.C. Munson, April, pp. 54–58.
"Lifetime Costing of the Body-in-White: Steel vs. Aluminum" (*Overview*), H.N. Han and J.P. Clark, May, pp. 22–28.
"Metallurgical Processes for the Year 2000 and Beyond II: Q & A" (*1995 Review of Extraction & Processing*), H.Y. Sohn, April, pp. 47–52.
"Producing Thin Strips by Twin-Roll Casting—Part I: Process Aspects and Quality Issues" (*Overview*), B.Q. Li, May, pp. 29–33.
"Producing Thin Strips by Twin-Roll Casting—Part II: Process Modeling and Development" (*Overview*), B.Q. Li, August, pp. 13–17.
"Recovering Flake Graphite from Steelmaking Kish" (*Research Summary*), L.J. Nicks, F.H. Nehl, and M.F. Chambers, June, pp. 48–51.
"Step Inside the Cyberworld of a Virtual Reality Steel Mill" (*Metallurgraphics: Special Edition*), T.M. Beazley, December, pp. 12–13. <http://www.tms.org/pubs/journals/JOM/9512/Beazley-9512.html>

Lead, Zinc, Tin

"The Effect of Surface Modification on Fretting Fatigue in Ti Alloy Turbine Components" (*Research Summary*), S. Chakravarty, R.G. Andrews, P.C. Patnaik, and A.K. Koul, April, pp. 31–35.
"Evaluating Additives and Impurities in Zinc Electrowinning" (*Research Summary*), J.A. Gonzalez-Dominguez and R.W. Lew, January, pp. 34–37.
"Events and Trends in Metal and Mineral Commodities" (*1995 Review of Extraction & Processing*), M.C. Munson, April, pp. 54–58.
"Recovering Lead from Batteries" (*Overview*), R.D. Prengaman, January, pp. 31–33.
"Zinc Recycling through the Modified Zincex Process" (*1995 Fall Extractive Meeting Preview: Secondary Zinc*), G. Díaz, D.M. San Lorenzo, and C.L. Gallego, October, pp. 22–23.

Lightweight Materials

"Computed Tomography Part III: Volumetric, High-Resolution X-Ray Analysis of Fatigue Crack Closure" (*Research Summary*), S.R. Stock, A. Guvenilir, T.M. Breunig, J.H. Kinney, and M.C. Nichols, January, pp. 19–23.
"Continuous-Fiber Reinforced Al Composites: A New Generation" (*Overview*), H.E. Deve and C. McCullough, July, pp. 33–37.
"Detecting In-Situ Active Corrosion by a SQUID Magnetometer" (*Research Summary*), D. Li, Y. Ma, W.F. Flanagan, B.D. Lichter, and J.P. Wikswo, Jr., September, pp. 36–39.
"Developments in the Global Mg Market" (*Economics*), D.M. Magers, July, p. 26.
"Effects of Sodium and Bismuth in Aluminum-Magnesium Alloys" (*Research Summary*), D.E.J. Talbot and D.A. Granger, February, pp. 44–46.
"Forming and Bonding Techniques for High-Strength Aluminum Alloys" (*Overview*), H.E. Friedrich, February, pp. 33–35.
"Gamma Titanium Aluminides" (*Conference Review*), Y.-W. Kim, July, p. 38.
"Gamma Titanium Aluminides: Their Status and Future" (*Overview*), Y.-W. Kim, July, pp. 39–41.
"The Increasing Use of Aluminum in Automotive Applications" (*Overview*), K.R. Brown, M.S. Venie, and R.A. Woods, July, pp. 20–23.
"Is It Time to Throw in the Towel on Advanced Materials?" (*Commentary*), F.H. Froes, March, p. 12.
"Lightweight Materials for Transportation Applications" (*Commentary*), D.R. Lesuer and G.J. Kipouros, July, p. 17.
"Magnesium and Other Reactive Metals: Have They Matured" (*Conference Review*), G.J. Kipouros, December, pp. 38–39.
"Magnesium Castings for Automotive Applications" (*Overview*), A. Luo, J. Renaud, I. Nakatsugawa, and J. Plourde, July, pp. 28–31. (*Correction printed in September, p. 4.*)
"Modification of Al-Si Alloys: Microstructure, Thermal Analysis, and Mechanisms" (*Overview*), S.-Z. Lu and A. Hellawell, February, pp. 38–40.
"Relating the Debye Temperature and Structural Stability of Rapidly Solidified Al Alloys" (*Research Summary*), R. Dasgupta and S.K. Bose, March, pp. 20–22.
"The Shipboard Exposure Testing of Aircraft Materials" (*Research Summary*), E. Tankins, J. Kozol, and E.W. Lee, September, pp. 40–44.
"Strategically Integrated Partnerships for Materials and Auto Producers" (*Industrial Insight*), P.R. Bridenbaugh, July, pp. 18–19.
"Synthesizing Aluminum Alloys by Double Mechanical Alloying" (*Research Summary*), L. Froyen, L. Delaey, X.P. Niu, P. Le Brun, and C. Peytour, March, pp. 16–19.

Material Matters

"Coming Soon—An EIT for Metallurgists" (*Material Matters*), M.E. Schlesinger, April, p. 77. <http://www.tms.org/pubs/journals/JOM/matters/matters-9504.html>
"Copyright Protection for Engineering Drawings" (*Material Matters*), A.B. Silverman, September, p. 65. <http://www.tms.org/pubs/journals/JOM/matters/matters-9509.html>
"GATT Brings Major Changes in U.S. Patent Law" (*Material Matters*), D.V. Radack, May, p. 79. <http://www.tms.org/pubs/journals/JOM/matters/matters-9505.html>
"Improving Plant Performance Through Gainsharing" (*Material Matters*), W. Imberman, July, p. 57. <http://www.tms.org/pubs/journals/JOM/matters/matters-9507.html>
"Is 'No-Choice' the Choice for Future Metallurgical PE Exams?" (*Material Matters*), M.E. Schlesinger, March, p. 63. <http://www.tms.org/pubs/journals/JOM/matters/matters-9503.html>
"Reading and Understanding Patent Claims" (*Material Matters*), D.V. Radack, November, p. 69. <http://www.tms.org/pubs/journals/JOM/matters/matters-9511.html>
"The Relationship Between Basic and Improvement Patents" (*Material Matters*), A.B. Silverman, January, p. 50. <http://www.tms.org/pubs/journals/JOM/matters/matters-9501.html>
"Understanding Patent Infringement Legal Opinions" (*Material Matters*), D.V. Radack, December, p. 54. <http://www.tms.org/pubs/journals/JOM/matters/matters-9512.html>
"Why Do Engineers Have to Take Registration Exams?" (*Material Matters*), M.E. Schlesinger, June, p. 59. <http://www.tms.org/pubs/journals/JOM/matters/matters-9506.html>

Mechanical Properties

"Continuous-Fiber Reinforced Al Composites: A New Generation" (*Overview*), H.E. Deve and C. McCullough, July, pp. 33–37.
"The Feasibility of Forming Superhard Nitrides by Ion Implantation" (*Research Summary*), B. Park, November, pp. 49–51.
"Growth Continues for Diamond, DLC, and CBN Markets" (*Economics*), T. Abraham, November, p. 60.
"High-Performance Diamond and Diamond-like Coatings" (*Overview*), S.J. Bull and P.R. Chalker, April, pp. 16–19.
"Mechanical Issues in Laser and Abrasive Water Jet Cutting" (*Research Summary*), J. Singh and S.C. Jain, January, pp. 28–30.
"Novel Alumina Titanium-Carbonitride Nickel Composites" (*Research Summary*), P. Bowen, C. Bonjour, C. Carry, D. Gonseth, H. Hofmann, D. Mari, R. Mulone, and P. Streit, November, pp. 56–58.
"Recent Developments in the Search for Ultrahard Materials" (*Commentary*), L. Martinez, Nov., p. 48.
"The Transient Plastic Phase Processing of Ceramic-Ceramic Composites" (*Overview*), M. Barsoum, A. Zavaliangos, S. Kalidindi, T. El-Raghy, and D. Brodkin, November, pp. 52–55.
"Using Coated Ceramic Particles to Increase Wear Resistance in High-Speed Steels" (*Research Summary*), C. Jouanny-Tresy, M. Vardavoulias, and M. Jeandin, April, pp. 26–30.

Metallurgraphics

"A Big Car for a Big Job," September, p. 60.
"Making the Oscar: Metal's Award-Winning Performance" (*Metallurgraphics: Special Edition*), T.M. Beazley, March, pp. 10–11.
"The Modern Home: A Study in Steel and Aluminum" (*Metallurgraphics*), T.M. Beazley, June, p. 52.
"Piecing it All Together," September, p. 60.
"Racing to Develop a Lighter Spaceframe," September, p. 60.
"Recycling Industries Reach Out with Public Campaigns" (*Metallurgraphics*), T.M. Beazley, October, p. 10.
"Step Inside the Cyberworld of a Virtual Reality Steel Mill" (*Metallurgraphics: Special Edition*), T.M. Beazley, December, pp. 12–13. <http://www.tms.org/pubs/journals/JOM/9512/Beazley-9512.html>
"Supersonic Automotive Travel: Fast Approaching Reality?" (*Metallurgraphics: Special Edition*), T.M. Beazley, July, pp. 12–13.
"What Would the Wright Brothers Think?" September, p. 60.

Modeling & Simulation

"An Integrated Procedure for Modeling Investment Castings" (*Overview*), J.S. Tu, R.K. Foran, A.M. Hines, and P.R. Aimone, October, pp. 64–68. <http://www.tms.org/pubs/journals/JOM/9510/Tu-9510.html>
"The Computer-Aided Hot-Forging Simulation of P/M Connecting Rods" (*Overview*), A.G.K. Jinka, August, pp. 42–45.
"Computer-Assisted Riser Design and Placement for Casting" (*Design*), S.M.H. Darwish, October, pp. 60–63.
"Metallurgical Processes for the Year 2000 and Beyond II: Q & A" (*1995 Review of Extraction & Processing*), H.Y. Sohn, April, pp. 47–52.
"The Modeling of Interfaces: Atoms or Continua?" (*Tutorial*), R. Phillips, March, pp. 37–42, 74–75.
"Predicting Residual Stresses in Gas Turbine Components" (*Research Summary*), R.A. Wallis and I.W. Craighead, October, pp. 69–71.
"Process Modeling Today: From Lab to Shop and from

Art to Part" (*Commentary*), S.C. Jain, October, p. 55.
"Processing Maps for Optimizing Gas Atomization and Spray Deposition" (*Overview*), S. Hariprasad and S.M.L. Sastry, October, pp. 56–59.
"Recent Developments in a Vision-Based Surface Strain Measurement System" (*Overview*), D.W. Manthey and D. Lee, July, pp. 46–49. <http://www.tms.org/pubs/journals/JOM/Manthey-9507.html>
"A Three-Step Approach to Designing a Metal-Forming Process" (*Overview*), J.S. Gunasekera and A.F. Aii, June, pp. 22–25.

News & Update

"Agreement Establishes Iron Powder Producer in India," September, p. 9.
"Alcan Announces Sale of Downstream Businesses," June, p. 6.
"Aluminum Association Focuses on Market Opportunities and Political Strategies at Spring Meeting" (*Conference Notes*), June, p. 6.
"Aluminum Can Recycling Increases Significantly from Previous Year," May, p. 5.
"Aluminum Gains Ground in Autos through a Number of Projects," February, pp. 5, 13.
"Aluminum Shipments Increase Three Percent," May, p. 5.
"American Superconductor Launches Plans for First Commercial Product in 1997," June, p. 9.
"Analysts Predict Bright Prospects for Al Market," December, p. 5.
"Analysts Project Increased Utilization of Micromachining Technology," November, p. 12.
"Analysts Project World Process Controls Market Will Reach $49 Billion by 1998," March, p. 6.
"Anglo American Corporation Remains Largest Mining Group; RTZ is Second," August, p. 5.
"Argonne Laboratory Works with Big Three Auto Makers to Research Laser Welding," January, p. 6.
"Argonne National Laboratory Report Reviews 1994 Projects" (*The Reporter*), February, p. 9.
"Association Releases Forging Industry Sales Figures," August, p. 8.
"ATP Develops Six Technology Programs," Jan., p. 9.
"Automotive Industry Utilizes Plastics Substitution in Exteriors, Under the Hood," July, p. 9.
"Automotive Steel Industry Anticipates Third Strong Year," April, p. 6.
"Bacteria May Take a Bite Out of Cyanide Wastes," May, p. 4.
"Battelle Forecasts Increase in Research Expenditures in 1995," March, p. 9.
"BMDO Continues Work on Several Technology Applications Projects" (*The Reporter*), November, p. 17.
"Budd Company Receives $2 Million Grant to Develop Transfer/Injection Molding," December, p. 6.
"Bureau of Mines Offers Quarterly CD-ROMs on Minerals and Materials," April, p. 3.
"Businessline," January, pp. 4, 5, 6; March, p. 4, 5, 6; April, p. 3, 4, 5; May, p. 5, 6; June, p. 5, 7; July, p. 6, 7, 9; August, p. 8; September, p. 8, 11.; December, pp. 4, 5.
"Casting Process Produces Composites Faster, Reduces Costs," April, p. 5.
"China Solicits International Investment for National Gold Mining Project," October, p. 5.
"Collaboration Seeks Production of Low-Cost, High-Performance Indium Phosphide Materials," March, p. 8.
"Collaboration Yields Technology for Imaging Electrical Current" (*High T_C Update*), August, p. 11.
"Commission Offers New Publication for Engineers," March, p. 9.
"Companies, Organizations Offer Aluminum Sites on the World Wide Web," July, p. 7.
"Company Develops Polymer with Strength of Steel," May, p. 8.
"Company Moves Ahead in Developing On-Site Pot Lining Processing Facility," June, p. 6.
"Company Projects Large Savings from Joint Corrosion Research with Argonne Laboratory," June, p. 8.
"Conference Offers Insight into Asian-Pacific Steel Industry in 2005," December, p. 4.
"Congress Elects to Close the Office of Technology," December, p. 10.
"Congress Funds Basic Research over Applied R&D," November, p. 19.
"Consortium Researches Improved Ceramic Manufacturing Technologies," October, p. 7.
"Consultant Forecasts Growth in Ferrous Scrap Supplies to Meet World Demand," February, pp. 4, 13.
"Consulting Survey Indicates Power Shift in Automotive Supply Chain," September, p. 10.
"Corrosion Costs U.S. Economy $300 Billion Annually, Says Battelle Study," June, p. 8.
"CRADA Partners Develop Modeling Tools to Improve U.S. Semiconductor Industry," August, p. 11.
"CRADA Studies Heat-Treating Using Ceramic Microspheres," July, p. 8.
"Crystal Approximation Theory Simplifies and Accelerates Alloy Design," June, p. 8.
"Deputy Assistant Secretary Stresses Environmental Programs in Defense Mission," November, pp. 18–19.
"Development of a Materials Testing Method Holds Promise for Aircraft Safety," August, p. 10.
"DOE Offers Two Reports on Federal Programs," August, p. 39.
"DOE Proposes $1.7 Billion Downsizing Initiative," July, p. 11.
"DOW Announces Closing of Segment of Magnesium Plant, Expansion of Existing Firm," January, p. 5.
"Electron Microscope Offers Possibility of Improved Metals and Ceramics," November, p. 14.
"Electrorefining Process May Save Billions in Disposing of Spent Nuclear Fuel," July, p. 6.
"EPA Works with Industry to Improve Environmental Regulations," January, p. 9.
"European P/M Industry Shows Encouraging Growth Trends," August, p. 8.
"Executives Discuss World Steel Issues at International Iron and Steel Institute's Annual Conference" (*The Reporter*), November, p. 4.
"FAA Evaluates In-Practice Reliability of Eddy Current Inspections," February, p. 7.
"The Federation of Materials Societies Holds Trustees Meeting" (*The Reporter*), September, p. 12.
"Financing Company Predicts Continued Growth and Rising Prices in Plastics Industry," August, p. 8.
"FMS Reiterates Policy Recommendations," April, p. 8.
"Focus on Batteries," January, p. 8.
"Focus on the OIT," October, p. 4–9.
"Futuristic Car Project Leaves the Starting Gate; Needs Changes to Go the Distance," January, p. 7.
"*Galvin Report* Recommends Major Changes to National Lab System," June, pp. 10–11.
"German Mag-Lev System Selects Al Vehicles," January, p. 5.
"Government Develops Standards Training for Russia and Newly Independent States," March, p. 9.
"Government Report Recommends Exploration of Biomaterials," February, p. 7.
"Government Sites on the Internet" (*The Reporter*), June, p. 10.
"Guinness Book of Records Reconsiders Listing of World's Most Slippery Solid," January, p. 6.
"House Budget Committee Approves Initial Spending Cuts for 1996 Fiscal Year" (*The Reporter*), May, p. 10.
"House Science Committee Defeats Proposed NSF Name Change," August, p. 39.
"Hydro Buoyed by Swell of Maritime Applications," March, p. 5.
"IBM Announces Breakthrough in Magnetic Data Storage Density," June, p. 9.
"ICF Kaiser and Nippon Steel Acquire Direct Iron Reduction Technology," November, p. 4.
"The Importance of Permanent Magnet Materials in Electric Motor Design Increases," February, p. 8.
"Industrial Agreement Develops Transformer Using High-Critical-Temperature Superconductors," March, p. 8.
"Industries Commission Closed-Looped Recycling System for Semiconductor Plating," May, p. 9.
"Industry Analysts Forecast Expansion of Demand for Recycled Plastics," June, p. 5.
"Industry, Government Partnership Tests High-T_C Superconducting Power Cables," April, p. 7.
"Industry/Government Partnership Cooperates to Advance Semiconductor Industry," December, p. 8.
"Industry Projects Receive Advanced Technology Program Funding," October, p. 4.
"Injection Molders Believe the Industry Needs a Job Certification Program," September, p. 9.
"International Magnesium Association Presents Three Awards of Excellence," September, p. 8.
"Japan's Demand for Al Beverage Cans Increases," March, p. 5.
"Joint Direct Steelmaking Program Releases Final Report," February, p. 4.
"Kaiser Aluminum, CNNC Sign Agreement on Chinese Smelter Venture," September, p. 8.
"Kennecott Completes $880 Million Smelter/Refinery Project," November, p. 4.
"LANL Researchers Develop Flexible Thick-Film Superconductor with High Current Density," June, p. 9.
"Los Alamos Scientist Coats Kevlar Fibers for Greater Durability," May, p. 6.
"Los Alamos Scientists Create Atom-Scale Models of Friction," May, p. 8.
"Los Alamos Scientists Study Explosive Containers," August, p. 10.
"Los Alamos Scientists Study Impact of Nuclear Weapon Casing Preparation," December, p. 7.
"Magnesium Shipments Reach Record High; U.S. Industry Injured by Imports," July, p. 7.
"Materials Education Council Seeks Experiments for Workshop," May, p. 8.
"Mechanisms for Product Testing, Certification Are Costly in the United States," May, p. 10.
"Metal Powder Federation Opens International Design Competition," January, p. 6.
"Metals Price Growth Rate Hits Six-Year High," January, p. 4.
"Miscellanea," January, p. 9; February, p. 5, 6, 8; March, p. 7; April, p. 7, 8; May, p. 8; June, p. 9; July, p. 10; August, p. 5, 6; September, p. 9, 10; November, p. 12.; December, pp. 6, 8.
"MIT Builds Japanese Materials Science and Engineering Database," November, p. 19.
"MPIF Announces Award-Winning Powder Metallurgy Parts of the Year" (*The Reporter*), July, p. 8.
"Nanostructural Materials Will Pack More Memory in Smaller Spaces," February, p. 8.
"NASA Acquisition Internet Service Debuts," November, p. 19.
"NASA Develops New Imaging Sensor," August, p. 11.
"National Committee Drafts Guidelines for Science Education in the United States," February, p. 9.
"Naval Surface Warfare Center Hosts Workshop on MMCs," April, p. 5.
"New CRADA Examines Elemental Characterizations of Soils and Ores," May, p. 4.
"New Plasma Spraying Center Opens in France," June, p. 7.
"New Process Allows On-Site Metals Recycling for Electroplaters," September, p. 11.
"New Removal Process Cleans Up Radioactive Wastes," January, p. 4.
"New Report Forecasts Increasing Demand for Metallizing Technologies," December, p. 6.
"1994 Annual Report Summaries," November, pp. 6, 8, 10.
"1994 Annual Report Summaries," September, pp. 5–6.
"The 1994 Primary Aluminum Industry: The Year in Review," November, p. 6.
"The 1994 Steel Market: The Year in Review," September, p. 5.

"1996 Gordon Conference in Metallurgy Focuses on Materials Modeling," November, p. 12.
"NIST Appropriation Reduced by $63 Million," October, p. 4.
"NIST Celebrates 40 Years of Semiconductor Research," September, p. 11.
"NIST Develops Sensor to Detect Cracks in Structures and Composite Parts," October, p. 8.
"NIST Establishes New Optoelectronics Division," January, p. 8.
"NIST Materials Theory Center Supports Eight Modeling Workshops," June, p. 7.
"NIST Offers Assistance on Environmental Problems," March, p. 4.
"NIST Physicists Think Small When Working on Circuits," November, p. 17.
"NIST Seeks $1 Billion in Funding for Fiscal Year 1996," April, p. 8.
"Norfolk State University Hosts National Educators' Workshop" (*The Reporter*), August, p. 12.
"North Carolina State Researchers Earn Patent for Domain Epitaxy," January, p. 8.
"Northrop Grumman Receives $3.4 Million Contract from ARPA for 'Smart' Materials," August, p. 10.
"Northwest Mining Association Centennial Meeting Examines U.S. Mining" (*Conference Notes*), February, p. 4.
"NRC Says Changes Put EPA Research Program Back on Track," May, pp. 10–11.
"NRC Suggests More Reciprocity from Japan," December, p. 10.
"NSF Renews Funding for Nine STCs," July, p. 11.
"Ontario Adopts Strict Control Limits on Mining Operations," January, p. 9.
"Ormet Joins International Wheel Consortium; Begins Construction of New Casting Facility," August, p. 6.
"ORNL Perfects Process for Melting Nickel and Iron Aluminides," May, p. 6.
"OTA Finds Basic Research is No Guarantee to Success," December, p. 10.
"OTA Reaches Promising Conclusions on Prospects of a Superefficient Car" (The Reporter), Dec., p. 7.
"OTA Reports Predicts Issues for Debate in National Space Transportation Policy," August, p. 54.
"Outlook for Tin Appears Brighter in 1995," June, p. 5.
"Plasma Processing Announces Joint Venture with Harbison Walker Refractories," October, p. 6.
"Plastics Periscope," February, p. 7; April, p. 6; June, p. 8; August, p. 10; November, p. 14.
"Polycrystalline Silicon Microengine Operates ina Microworld," December, p. 8.
"Primary Magnesium Shipments Reach New High," April, p. 4.
"Primary Standards Laboratory Expands Role as a 'User Facility,'" February, p. 9.
"Proposal Aims to Restrict Government Subsidies of Specialty Steels," December, p. 9.
"Queensland Offers Live Microscopy Via Web," December, p. 7.
"Rapid Solidification Perspective on CD Welding Opens Joining Possibilities," March, p. 6.
"Recent News from the Federation of Materials Societies" (*The Reporter*), March, p. 9.
"Recent Publications," March, p. 8; December., p. 10..
"Renault Project Shows Promising Results for Al," April, p. 4.
"Rensselaer Scientists Fabricate Nonbrittle Silicon Carbide Composite Materials," March, p. 6.
"Report Details NIST Impacts on U.S. Industry," August, p. 54.
"Report Finds U.S. Flat Panel Display Industry Uncertain," November, p. 17.
"Reports from the United Nations' Seminar on the International Steel Industry and Recycling" (*The Reporter—Euro Edition*), May, p. 4.
"Research Center Evaluates Designs for Materials Facility in Space," July, p. 9.
"Researchers Complete Initial Experiments on Improving Bone Implant Devices," February, p. 6.
"Researchers Develop Dioxide Laser to Emit Blue Light," July, p. 10.
"Researchers Develop Innovative Approaches to Superconducting Tape Fabrication" (*High-T_c Update*), August, p. 11.
"Researchers Eliminate Roadblock to Plastics Recycling Technology," June, p. 5.
"Researchers Successfully Test Two of Nine Coils in Multitonne Magnet," March, p. 8.
"Researchers Test Fuel Cell in Race to Build an Electric Car," September, p. 11.
"Researchers Treat Ailments of Aging Aircraft," April, p. 6.
"Researchers Use Irradiation-Induced Fission to Improve Superconductors," July, p. 10.
"Researchers Work on Blue Light-Emitting Diodes," April, p. 7.
"Researchers Work to Develop Waste-Free Laser Coating System with CRADA," January, p. 6.
"Review Team Proposed Sweeping Changes at NASA" (*The Reporter*), July, p. 11.
"Reynolds Metals Introduces Improved Body Sheet," April, p. 4.
"Reynolds Metals Releases Results of Corrosion Study on Al Bridge Decks," August, p. 6.
"Reynolds Signs Agreements to Share Technology with Indian Companies," January, p. 5.
"Roll Forming Industry Experiences Drop in Orders," October, p. 7.
"'Rubcrete' Offers Possible Solution to Tire Disposal," January, p. 7.
"Sandia and General Motors Collaborate on Tougher Electronics Under the Hood," July, p. 10.
"Sandia Joins R&D Effort to Develop Teraflops Supercomputer," October, p. 9.
"SBA Awards Honeywell National Award of Distinction," October, p. 9.
"Science Advisors Disagree with Republican Congressional Leaders," June, p. 11.
"Scientists Search for Alternatives to Lead Solders," January, p. 8.
"Scientists Work on Cleaner Way to Reduce Magnesium in Aluminum Scrap," March, p. 5.
"Senate Yields; Congress Abolishes U.S. Bureau of Mines," November, p. 18.
"Sigma Xi Holds National Forum on Scientific Research," May, p. 11.
"Six More Firms Join Lightweight Steel Car Study," July, p. 9.
"Smart Guitars May Solve Military Aerospace Problems," October, p. 8.
"Smart Materials Fight Noise with Noise," Dec., p. 7.
"The Society of the Plastics Industry Reviews 1994 in News Briefing," March, p. 7.
"Software Package Predicts Grain Orientation in Ceramic Materials," October, p. 9.
"Space Shuttle Carries Second U.S. Microgravity Laboratory" (*The Reporter*), November, p. 18.
"Space Shuttle *Endeavor* Carries Solidification Experiment into Space," November, p. 12.
"Steel Industry Plans to Build Demonstration Ultralight Steel Auto Bodies," November, p. 14.
"Steel Industry, DOE Sign R&D Partnership Compact," July, p. 6.
"Study Suggests Rapid Prototyping Manufacturing Could Displace Conventional Methods of Fabrication," February, p. 6.
"Surfing the Web for Electronics Information" (*The Reporter*), May, p. 9.
"Tests at National Steel and Acme Steel Show Productivity Gains with Natural Gas," December, p. 4.
"Tests on Magnetic Storage Materials Indicate Progress," May, p. 9.
"Textron Receives Funding for Second Phase Project on Ceramic Composites," October, p. 7.
"Three-Year Project Examines Bacterial Pipe Corrosion Problems," February, p. 7.
"Tracking Primary Aluminum Production in the U.S.," January, p. 5; February, p. 5; March, p. 5; April, p. 4; May, p. 5; June, p. 6; July, p. 7; August, p. 6; September, p. 8; October, p. 6; December, p. 5.
"Transportation Sector Becomes Largest U.S. Market for Al," December, p. 5.
"U.N. Economic Commission for Europe Publishes Annual Steel Market Review" (*The Reporter*), January, p. 7.
"U.S. Bauxite Production Increases; Alumina Production Drops in 1994," October, p. 6.
"U.S. Bureau of Mines Develops Tool for Processing Primary Metals," August, p. 5.
"U.S. Bureau of Mines Starts Mining Copper—But without a Mine," March, p. 4.
"U.S. Copper Production Remains Level," October, p. 5.
"U.S. Deputy Trade Rep Explains MOU at Aluminum Extruders Meeting," May, p. 5.
"U.S. House Appropriations Committee Votes to Eliminate Bureau of Mines," August, pp. 12, 39.
"U.S. Industry, National Laboratory, and Russian Institute Sign CRADA," May, p. 9.
"U.S. Minerals Sector Posts Gains Based on Economy," April, p. 3.
"U.S. Science Agencies Continue to Feel the Sharp Edge of Budget Cuts," December, p. 9.
"U.S. Senate Offers Hope to USBM's Future," September, p. 12.
"U.S. Steel Recycling Rate Increases in 1994," May, p. 4.
"U.S. Steel Shipments Show Increase for Early 1995," September, p. 9.
"USBM Assists in Inventory of Abandoned Mines," November, p. 4.
"Walt Disney Collaborates with Sandia National Laboratories on Semiconductor Bridge," February, p. 8.
"Waste Oxide Recycling Project Demonstrates Success," April, p. 3.
"The Wave of World Wide Web and Other Internet Activities Continues to Swell," September, p. 12.
"Will Natural Selection Be Applied to Materials Design," December, p. 6.
"Work Continues on New Generation of Fighter Aircraft," September, p. 10.

Opinion

"The Consolidation Processing of Powder Materials" (*Commentary*), M.G. McKimpson and J. Sears, August, p. 25.
"Critical Issues in the Reform of the Mining Law in the United States" (*1995 Review of Extractive Metallurgy*), April, pp. 44–45.
"Expanding the Application of Ceramic-Matrix Composites" (*Commentary*), P.K. Liaw, October, p. 29.
"Experts Consider the Future of Electronic Materials" (*Forum Roundtable*), March, pp. 64–65.
"Epitaxy: The Key to High-Performance Semiconductor Devices" (*Commentary*), J.M. Parsey, Jr., December, p. 24.
"Forecasting Trends in Al Manufacturing and Marketing" (*Industrial Insight*), T.M. Beazley, November, pp. 26–27.
"The High-Strain-Rate Deformation and Fracture of Materials" (*Commentary*), B. Pletka, May, p. 54.
"In the Final Analysis," J.J. Robinson, January, p. 2; February, p. 2; March, p. 2; April, p. 2; May, p. 2; June, p. 2; July, p. 2; August, p. 2; September, p. 2; October, p. 2; November, p. 2; December, p. 2.
"Is It Time to Throw in the Towel on Advanced Materials?" (*Commentary*), F.H. Froes, March, p. 12.
"The Journal Talks with Congress's Robert S. Walker and George E. Brown, Jr." (*Interview*), June, pp. 16–19.
"The Journal Talks with 1994 TMS President Lionel C. Kimerling," February, pp. 74–75.
"The Journal Talks with U.S. Bureau of Mines Director Rhea L. Graham" (*1995 Review of Extractive Metallurgy*), April, pp. 42–43.
Letters to the Editor, June, pp. 3–4; Sept., pp. 3–4.
"Lightweight Materials for Transportation Applications"

(*Commentary*), D.R. Lesuer and G.J. Kipouros, July, p. 17.
"Materials, Processing, and Reliability Issues for PWB Assemblies" (*Commentary*), D.R. Frear and W.L. Winterbottom, June, p. 26.
"Process Modeling Today: From Lab to Shop and from Art to Part" (*Commentary*), S.C. Jain, October, p. 55.
"Progress Toward Bulk Application of High-T_c Superconductors" (*Commentary*), A. Goyal, August, p. 55.
"Recent Developments in the Search for Ultrahard Materials" (*Commentary*), L. Martinez, Nov., p. 48.
"*Retrospect*," D.F. Hasson, January, p. 64; February, p. 84; March, p. 80; April, p. 88; May, p. 88; June, p. 72; July, p. 68; August, p. 84; September, p. 76; October, p. 88; November, p. 84; December, p. 80.
"The Role of Solidification in Products and Processes" (*Commentary*), S. Viswanathan, February, p. 37.
"Thin Films and Interfaces: Modeling and Characterization" (*Commentary*), D.C. Paine, March, p. 30.
"Vox Populi: Examining the Results of the 1994 *JOM* Reader Survey," (*Overview*), J.J. Robinson, January, pp. 10–11.
"Why the U.S. Government Should Continue Funding Advanced Technology Programs" (*Opinion*), R.A. Schiffman, June, pp. 14–15.

Powder Metallurgy

"The Commercial Application of Low-Cost Titanium Composites" (*Overview*), S. Abkowitz, P.F. Weihrauch, S.M. Abkowitz, and H.L. Heussi, August, pp. 40–41.
"The Computer-Aided Hot-Forging Simulation of P/M Connecting Rods" (*Overview*), A.G.K. Jinka, August, pp. 42–45.
"The Consolidation Processing of Powder Materials" (*Commentary*), M.G. McKimpson and J. Sears, August, p. 25.
"The Ion-Beam Processing of Powders" (*Overview*), H.R. Müller and W.J. Ensinger, April, pp. 20–25.
"Liquid-Phase Sintering under Microgravity Conditions" (*Overview*), R.M. German, R.G. Iacocca, J.L. Johnson, Y. Liu, and A. Upadhyaya, August, pp. 46–48.
"The One-Step Synthesis of Dense Titanium-Carbide Tiles" (*Applied Technology*), R.V. Raman, S.V. Rele, S. Poland, J. Lasalvia, M.A. Meyers, and A.R. Niiler, March, pp. 23–25.
"The Technology and Commercial Status of Powder-Injection Molding" (*Overview*), A. Bose, August, pp. 26–30.
"Thermal Spraying I: Powder Consolidation—From Coating to Forming" (*Overview*), R.W. Smith and R. Knight, August, pp. 32–39.

Professional Affairs

"AAES Reports the Engineering Salary Trends of 1994" (*Professional Affairs*), T.M. Beazley, May, pp. 12–13. <http://www.tms.org/pubs/journals/JOM/Beazley-9505.html>
"Are Your Technical Journals an Endangered Species?" (*Economics*), G.W. Warren and K. Gessesse, January, pp. 12–13.
"Coming Soon—An EIT for Metallurgists" (*Material Matters*), M.E. Schlesinger, April, p. 77. <http://www.tms.org/pubs/journals/JOM/matters/matters-9504.html>
"Engineering Education in a Global Community II: Canada" (*Education*), A. Meisen, September, pp. 18–21.
"Engineering Education in a Global Community IV: Hungary and Eastern Europe" (*Education*), P. Tardy, December, p. 48.
"Engineering Education in a Global Technical Community" (*Conference Review*), C.J. McHargue and M.J. Yacamán, July, pp. 14–16.
"Is 'No-Choice' the Choice for Future Metallurgical PE Exams?" (*Material Matters*), M.E. Schlesinger, March, p. 63. <http://www.tms.org/pubs/journals/JOM/matters/matters-9503.html>
"Metallurgy and Materials Research in Mexico" (*Forum International*), M.J. Yacamán, January, pp. 52–53.
"Understanding the *Internet*: A Guide for Materials Scientists and Engineers" (*Featured Overview*), K.J. Meltsner, April, pp. 9–13. <http://www.tms.org/pubs/journals/JOM/Meltsner-9504.html>
"Why Do Engineers Have to Take Registration Exams?" (*Material Matters*), M.E. Schlesinger, June, p. 59. <http://www.tms.org/pubs/journals/JOM/matters/matters-9504.html>

Recycling & Secondary Recovery

"An Atomization Technique for Upgrading Automotive Al Scrap" (*1995 Fall Extractive Meeting Preview: Secondary Aluminum*), K.P. Olsen, G. Sterzik, and H. Henein, October, pp. 14–15.
"Biological and Biotechnological Waste Management in Materials Processing" (*Overview*), A.G. Raraz, February, pp. 56–63.
"Copper Recycling from Waste Pickling Solutions" (*1995 Fall Extractive Meeting Preview: Secondary Copper*), G.J. Román-Moguel, G. Plascencia, J. Pérez, and A. García, October, pp. 18–19.
"Issues in the Melting and Reclamation of Aluminum Scrap" (*Overview*), R.D. Peterson, February, pp. 27–29.
"Metallurgical Processes for the Year 2000 and Beyond II: Q & A" (*1995 Review of Extraction & Processing*), H.Y. Sohn, April, pp. 47–52.
"Production of By-Product Mercury" (*1995 Fall Extractive Meeting Preview: General Recycling*), P.B. Queneau, C.W. Kenney, and B.J. Hansen, October, pp. 24–28.
"Recovering Flake Graphite from Steelmaking Kish" (*Research Summary*), L.J. Nicks, F.H. Nehl, and M.F. Chambers, June, pp. 48–51.
"Recovering Lead from Batteries" (*Overview*), R.D. Prengaman, January, pp. 31–33.
"Recovering Metals from Hydrometallurgical Residues" (*Research Summary*), M.G. Sánchez Loredo, G.J. Román-Moguel, and F. de J. Carrillo Romo, June, pp. 46–47.
"Recovering Metals from Wastes" (*Industrial Insight*), V. Ramachandran and S.R. Gilbert, February, p. 64.
"Recovering Plastics for Recycling by Mineral Processing Techniques" (*Overview*), R. Buchan and B. Yarar, February, pp. 52–55.
"Recycling Al-Si Allcys from Spacecraft Accessories" (*1995 Fall Extractive Meeting Preview: Secondary Aluminum*), P.C. Olaru, October, p. 16.
"Recycling Aluminum Foil from Post-Consumer Beverage Cartons" (*1995 Fall Extractive Meeting Preview: Aluminum Consumer Packaging*), P. Charlier and G. Sjöberg, October, pp. 12–13.
"Recycling Industries Reach Out with Public Campaigns" (*Metallurgraphics*), T.M. Beazley, October, p. 10.
"The Treatment and Minimization of Wastes" (*Conference Review*), V. Ramachandran, February, pp. 50–51.
"Zinc Recycling through the Modified Zincex Process" (*1995 Fall Extractive Meeting Preview: Secondary Zinc*), G. Díaz, D.M. San Lorenzo, and C.L. Gallego, October, pp. 22–23.

Shaping & Forming

"The Bulk Application of High-T_c Superconductors in Japan" (*Overview*), K-I. Sato, August, pp. 65–67.
"The Commercial Application of Low-Cost Titanium Composites" (*Overview*), S. Abkowitz, P.F. Weihrauch, S.M. Abkowitz, and H.L. Heussi, August, pp. 40–41.
"The Computer-Aided Hot-Forging Simulation of P/M Connecting Rods" (*Overview*), A.G.K. Jinka, August, pp. 42–45.
"DOE's Program on the Application of High-T_c Wire" (*Overview*), R. Hawsey and J. Daley, August, pp. 56–58.
"Forming and Bonding Techniques for High-Strength Aluminum Alloys" (*Overview*), H.E. Friedrich, February, pp. 33–35.
"High-Velocity Metal Forming—An Old Technology Addresses New Problems" (*Overview*), G.S. Daehn, M. Altynova, V.S. Balanethiram, G. Fenton, M. Padmanabhan, A. Tamhane, and E. Winnard, July, pp. 42–45.
"Mechanical Issues in Laser and Abrasive Water Jet Cutting" (*Research Summary*), J. Singh and S.C. Jain, January, pp. 28–30.
"Plasma-Spray Forming Ceramics and Layered Composites" (*Research Summary*), S. Sampath, R. Gansert, and H. Herman, October, pp. 30–33.
"Predicting Residual Stresses in Gas Turbine Components" (*Research Summary*), R.A. Wallis and I.W. Craighead, October, pp. 69–71.
"Processing Maps for Optimizing Gas Atomization and Spray Deposition" (*Overview*), S. Hariprasad and S.M.L. Sastry, October, pp. 56–59.
"Recent Developments in a Vision-Based Surface Strain Measurement System" (*Overview*), D.W. Manthey and D. Lee, July, pp. 46–49. <http://www.tms.org/pubs/journals/JOM/Manthey-9507.html>
"The Sensitivity of Lab-Measured Friction Coefficients" (*Testing & Analysis*), J.P. Haruff, C.J. Van Tyne, and D.K. Matlock, July, pp. 50–52.
"The Status of Applications for High-T_c Superconducting Wire" (*Overview*), W.E. Brockenborough and A.P. Malozemoff, August, pp. 59–60.
"Superconductivity Research and Applications Development at IGC" (*Overview*), R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, and P. Haldar, August, pp. 61–64.
"The Technology and Commercial Status of Powder-Injection Molding" (*Overview*), A. Bose, August, pp. 26–30.
"Thermal Spraying I: Powder Consolidation—From Coating to Forming" (*Overview*), R.W. Smith and R. Knight, August, pp. 32–39.
"A Three-Step Approach to Designing a Metal-Forming Process" (*Overview*), J.S. Gunasekera and A.F. Ali, June, pp. 22–25.

Solidification

"A New, Third-Generation, Single-Crystal, Casting Superalloy" (*Overview*), G.L. Erickson, April, pp. 36–39.
"An Integrated Procedure for Modeling Investment Castings" (*Overview*), J.S. Tu, R.K. Foran, A.M. Hines, and P.R. Aimone, October, pp. 64–68. <http://www.tms.org/pubs/journals/JOM/9510/Tu-9510.html>
"Applying MHD Technology to the Continuous Casting of Steel Slab" (*Overview*), E. Takeuchi, May, pp. 42–45.
"Casting Al Sheets on a Lab-Scale, Single-Roll, Continuous Sheet Caster" (*Research Summary*), S.P. Mehrotra, M.R.R.I. Shamsi, and P.N. Bid, August, pp. 18–21.
"The Chronology of a Microgravity Spaceflight Experiment: IDGE" (*Overview*), M.E. Glicksman, M.B. Koss, and E.A. Winsa, August, pp. 49–54. <http://www.tms.org/pubs/journals/JOM/Glicksman-9508.html>
"Computer-Assisted Riser Design and Placement for Casting" (*Design*), S.M.H. Darwish, October, pp. 60–63.
"Effects of Oxygen on the Solidification Microstructure of $LaNi_5$" (*Research Summary*), T.W. Ellis, L.L. Jones, and T.E. Bloomer, February, pp. 47–49.
"Laser Research at Penn State's ARL," Sidebar to "Mechanical Issues in Laser and Abrasive Water Jet Cutting" (*Research Summary*), J. Singh and P. Denney, January, p. 30.
"Magnesium Castings for Automotive Applications" (*Overview*), A. Luo, J. Renaud, I. Nakatsugawa, and J. Plourde, July, pp. 28–31.
"Materials Processing with High Direct-Current Mag-

netic Fields" (*Overview*), P. Gillon, May, pp. 34–37.
"Optimizing the Corrosion Fatigue Properties of Co-Cr-Mo Hip Joints" (*Research Summary*), H.M. Tensi, H. Hooputra, W. Weinfurtner, and H. Mayr, January, pp. 25–27.
"Paths of Progress in Liquid Metal Processing" (*1995 Review of Extraction & Processing*), A. McLean, H. Soda, and I.D. Sommerville, April, pp. 67–72.
"Producing Thin Strips by Twin-Roll Casting—Part I: Process Aspects and Quality Issues" (*Overview*), B.Q. Li, May, pp. 29–33.
"Producing Thin Strips by Twin-Roll Casting—Part II: Process Modeling and Development" (*Overview*), B.Q. Li, August, pp. 13–17.
"The Role of Solidification in Products and Processes" (*Commentary*), S. Viswanathan, February, p. 37.
"The Use of Electromagnetic Casting for Al Alloys and Other Metals" (*Overview*), J.W. Evans, May, pp. 38–41.

Superconducting Materials

"The Bulk Application of High-T_c Superconductors in Japan" (*Overview*), K-I. Sato, August, pp. 65–67.
"Characterizing the Microstructure of Interfaces in Y-123 Thin Films" (*Testing & Analysis*), A.F. Marshall, March, pp. 43–46.
"DOE's Program on the Application of High-T_c Wire" (*Overview*), R. Hawsey and J. Daley, August, pp. 56–58.
"Progress Toward Bulk Application of High-T_c Superconductors" (*Commentary*), A. Goyal, August, p. 55.
"The Status of Applications for High-T_c Superconducting Wire" (*Overview*), W.E. Brockenborough and A.P. Malozemoff, August, pp. 59–60.
"Superconductivity Research and Applications Development at IGC" (*Overview*), R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, and P. Haldar, August, pp. 61–64.

Surface Modification & Coatings

"Coating Ceramic Composites by a Laser In-Situ Reaction Technique" (*Research Summary*), N.B. Dahotre, C. Xiao, W. Boss, M.H. McCay, and T.D. McCay, October, pp. 51–53.
"The Effect of Surface Modification on Fretting Fatigue in Ti Alloy Turbine Components" (*Research Summary*), S. Chakravarty, R.G. Andrews, P.C. Patnaik, and A.K. Koul, April, pp. 31–35.
"The Eighth International Conference on Surface Modification Technology" (*Conference Review*), W.E. Reitz, April, pp. 14–15.
"Epitaxy: The Key to High-Performance Semiconductor Devices" (*Commentary*), J.M. Parsey, Jr., December, p. 24.
"The Feasibility of Forming Superhard Nitrides by Ion Implantation" (*Research Summary*), B. Park, November, pp. 49–51.
"From Research to Manufacture—The Evolution of MOCVD" (*Overview*), P. Grodzinski, S.P. DenBaars, and H.C. Lee, December, pp,. 25–31.
"High-Performance Diamond and Diamond-like Coatings" (*Overview*), S.J. Bull and P.R. Chalker, April, pp. 16–19.
"The Ion-Beam Processing of Powders" (*Overview*), H.R. Müller and W.J. Ensinger, April, pp. 20–25.
"Molecular-Beam Epitaxy and Related Growth Techniques" (*Overview*), C.W. Tu, December, pp. 34–37.
"Using Coated Ceramic Particles to Increase Wear Resistance in High-Speed Steels" (*Research Summary*), C. Jouanny-Tresy, M. Vardavoulias, and M. Jeandin, April, pp. 26–30.

Synthesis & Processing

"Fiber-Reinforced CMCs: Processing, Mechanical Behavior, and Modeling" (*Overview*), P.K. Liaw, October, pp. 38–44.
"Interconnected Metal-Ceramic Composites by Chemical Means" (*Research Summary*), E.D. Rodeghiero, O.K. Tse, and E.P. Giannelis, March, pp. 26–28.
"Joining Similar and Dissimilar Advanced Engineered Materials" (*Overview*), W.A. Baeslack III and F.H. Froes, March, pp. 13–15.
"Laser Research at Penn State's ARL," Sidebar to "Mechanical Issues in Laser and Abrasive Water Jet Cutting" (*Research Summary*), J. Singh and P. Denney, January, p. 30.
"Metallurgical Processes for the Year 2000 and Beyond II: Q & A" (*1995 Review of Extraction & Processing*), H.Y. Sohn, April, pp. 47–52.
"The One-Step Synthesis of Dense Titanium-Carbide Tiles" (*Applied Technology*), R.V. Raman, S.V. Rele, S. Poland, J. Lasalvia, M.A. Meyers, and A.R. Niiler, March, pp. 23–25.
"Processing Ceramic-Matrix Composites Using Electrophoretic Deposition" (*Research Summary*), A.R. Boccaccini and C.B. Ponton, October, pp. 34–37.
"Synthesizing Aluminum Alloys by Double Mechanical Alloying" (*Research Summary*), L. Froyen, L. Delaey, X.P. Niu, P. Le Brun, and C. Peytour, March, pp. 16–19.
"Synthesizing and Processing Advanced Materials" (*Conference Review*), J. Singh and S.M. Copley, March, p. 29.
"The Thermodynamics and Kinetics of Film Agglomeration" (*Tutorial*), D.J. Srolovitz and M.G. Goldiner, March, pp. 31–36, 76–77.
"The Workshop on Advanced Sintered Materials" (*Conference Review*), F.H. Froes, January, pp. 14–15.

Texture

"Materials Concepts Using *Mathcad* Part I: Euler Angle Rotations and Stereographic Projection" (*Forum Features*), K.J. Bowman, March, pp. 66–68.
"Materials Concepts Using *Mathcad* Part II: Homogeneous Nucleation" (*Forum Features*), K.J. Bowman, April, p. 78.
"Materials Concepts Using *Mathcad* Part III: Mohr's Circle and Principal Stresses" (*Forum Features*), K.J. Bowman, June, pp. 60–61.
"Materials Concepts Using *Mathcad* Part IV: Arbitrary Rotations of Second Rank Tensors" (*Forum Features*), K.J. Bowman, July, pp. 58–59.
"Materials Concepts Using *Mathcad* Part V: Rotations of Elastic Constants" (*Forum Features*), K.J. Bowman, September, pp. 66–67.
"Using Fractal Analysis to Describe Irregular Microstructures" (*Overview*), S.-Z. Lu and A. Hellawell, December, pp. 14–17.

TMS News

"Acta Metallurgica Awards Gold Metal," August, p. 70.
"Acta Metallurgica Awards to be Presented at the 1995 TMS Annual Meeting," February, p. 70.
"AIME Honors Award Recipients," April, p. 75.
"And the Winners Are. . .," June, p. 54.
"Annual Meeting Review," May, pp. 73–77.
"The Anticipated 1996 TMS Board of Directors," July, p. 55.
"Attendees Respond Favorably to TMS Annual Meeting Survey," December, pp. 49-51.
"Contest Winners Receive Complimentary Lodging," June, p. 56.
"Do You Know Someone Who Would Benefit from TMS Membership?" April, p. 74.
"Donors Listed on 1993–94 TMS Foundation Honor Roll," January, p. 43.
"Emerging in 1994 Equipped for the Present and Poised for the Future," March, p. 57.
"Engineering Societies Library Moves to Linda Hall," August, p. 70.
"I'm at Your Service—Customer Services Coordinator," C. Wilson, October, p. 74.
"I'm at Your Service—Director of Publishing Services," R. Makowski, August, p. 71.
"I'm at Your Service—Manager of Education & Professional Affairs," V. Koebnick, December, p. 52.
"I'm at Your Service—Manager of Member Services," J. Melder, September, p. 62.
"I'm at Your Service—TMS OnLine Supervisor," M.C. Munson, July, p. 56.
"In Memory of . . .," April, p. 75; June, pp. 55–56; October, p. 75; November, p. 67.
"*In Print* Catalog Offers 17 New Volumes," Nov., p. 66.
"International Groups Meet at Annual Meeting," July, p. 56.
"Keeping in Touch at TMS," July, p. 55.
"Korean Resort in Kyongju Hosts PRICM-2," August, pp. 69–70.
"A Letter to the Membership," B.W. Wessels, November, p. 65.
"Local Sections Name 1995–96 Chairs," October, p. 75.
"Materials Week '94 Offers Something for Everyone in the Materials Cycle, January, pp. 45–46, 48.
"Materials Week '95 Abounds with TMS Activities," September, pp. 61–62.
"Metaleaders," January, p. 48; April, pp. 74–75; June, p. 55; October, p. 75; November, p. 67.
"1994 at TMS: Reviewing the Year's Accomplishments," March, pp. 57–61.
"Nominees Needed for Society Committees," January, p. 42.
"Offshore Technology Conference, with TMS Programming, Arrives May 1st," April, p. 74.
"Public & Government Affairs Committee Adopts Bylaws," January, p. 48.
"Society Appoints New Vice President; Nominates Candidates for Positions on 1996 Board of Directors," July, pp. 53–54.
"Societyline," June, p. 55; July, p. 55; Aug., p. 71; Sept., p. 63; Oct., p. 75; Nov., p. 67, Dec., p. 51.
"TMS Announces Holiday Office Hours," Nov., p. 67.
"TMS At Your Service—Junior Engineering Technical Society," June, p. 54.
"TMS at Your Service—Resume Referral Service," October, p. 75.
"TMS Begins World Wide Web Service: http://www.tms.org," April, pp. 73–74.
"TMS Board of Directors Convenes in Rosemont," January, p. 47.
"TMS Board of Directors Holds Meeting in June," September, p. 63.
"TMS Board of Directors Meets in Las Vegas," May, p. 78.
"TMS Board of Directors Nomination Form," Oct., p. 73.
"TMS Establishes Three New Awards," August, p. 70.
"TMS Foundation Exceeds Initial Goal, Sets Sights Higher with New Strategic Management Plan," June, p. 53.
"TMS Foundation Gains Momentum," December, p. 51.
"TMS Honors & Awards Committee," Feb., pp. 65, 70.
"TMS Is Looking for HTML Volunteers," June, p. 56.
"TMS Offers Networking Assistance Paper to Engineers," June, p. 55.
"TMS OnLine Will Add Membership Directory, World Wide Web Service During 1995," Jan., pp. 41–42.
"TMS President Visits European Societies," Aug., p. 71.
"TMS Receives AIME Support for Four Largely WWW-Directed Member Service Projects," Nov., p. 66.
"TMS Recognizes Outstanding Achievements with Annual Honors and Awards," February, pp. 65–70.
"TMS Seeks Candidates for Board Positions," Oct., p. 73.
"TMS World Wide Web Service Continues to Grow as New Features Are Added," October, p. 74.
"Usage of World Wide Web Aspect of TMS OnLine Grows Apace," December, p. 52.
"Working Together with International Societies—The Chinese Society for Metals," September, p. 63.
"WWW Users, Send Us Your Favorite Links!" January, p. 42.
"Young Leaders Committee Invites Members 35 and Under to Business Meeting," February, p. 70.